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Subject: N12 Agency Scoping Meeting	
Client: USACE	
Project: N12 Niobrara East and West	Project No: 84534
Meeting Date: August 28, 2008	Meeting Location: WFLA Hall, Niobrara, NE
Notes by: M. Pillard and M. Hall	

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Attendees: (See attached sign-in sheets)

Topics Discussed: (See attached agenda)

Introduction: The participants introduced themselves with their agency and interest, if applicable.

Project History: HDR gave a brief project history (see attached Project History display board).

Detail range of alternatives: The participants were provided a map of the four alternative study corridors (see attached Project Location Map). HDR discussed the potential build alternative corridors, explained NDOR's preferred, and discussed other alternatives, such as dredging that will be considered.

Alternative 1 is the alignment NDOR originally proposed to construct. It is immediately adjacent to the existing alignment and will use some of the ROW of the existing alignment. A new road bed will be constructed and raised to an elevation that will accommodate future water levels of the Missouri River w/out overtopping. The existing roadway will be left open during construction. After construction, it will be closed and the concrete removed, but the road grade left in place (partly for protection of the new road).

Alternative 2 is an alignment that runs at the base of the bluffs. Again, road elevations would be constructed as appropriate. Some preliminary engineering was considered for this alignment by NDOR.

Alternative 3 is an alignment on the top of the bluffs. Some preliminary engineering was considered for this alignment by NDOR.

Alternative 4 is an alignment south of the bluffs that utilizes existing county roads where possible. This is a general alignment and no preliminary engineering has been applied.

Other potential alternatives that may be considered in the initial range of alternatives includes sediment removal from the rivers (Missouri and/or Niobrara) and mainstem dam operational changes.

Discuss issues identified during past coordination: HDR presented a board summarizing issues brought up by agencies during coordination with NDOR (see table, below).

Summary of Issues From Previous NDOR Coordination	
Issue	Agency
Wetlands/Waters of the U.S./Waterways	NRD, NGPC, USFWS, NPS
Fish/Wildlife Impacts; T&E Species; Migratory Birds	NGPC, USFWS, NPS
Water Quality	NPS
Wild and Scenic River	NPS, USFWS
Tribal Lands <ul style="list-style-type: none"> - burial grounds/TCPs - tourism/economics 	Santee Sioux Nation, Ponca Tribe of Nebraska, NSHS, Knox County

Archaeology Sites	NSHS, Knox County
Pierre Shale (geology)	Knox County, UNL – NE Geological Survey, NRD
Economics	Village of Niobrara, Knox County

Identify new agency issues: The participants provided concerns and input regarding the project and the study corridors.

NGPC/USFWS:

- Verdigre and Bazile Creek watersheds have or are proposed to have wetland/grassland/woodland conservation easements. This is part of the Legacy Project by the NGPC.
- Wildlife crossings implemented in the roadway design.
- T&E - Pallid sturgeon have been found south of the mouth of the Niobrara, least tern and piping plover (in Missouri River), American burying beetle (W. Knox Co.), bald eagle nesting sites, state-listed dace in Bazile Creek, whooping crane on Bazile Creek.

DEQ:

- Water quality concerns, altering a mainstem dam.

NPS:

- Feels concerns are well-documented in past coordination with NDOR. From a Wild and Scenic River perspective, they would like the road up on the bluffs (Alt. 4), but acknowledge and recognize other impacts.

NSHS:

- Archaeological impacts are irreversible.
- West of Niobrara – more archaeological issues, such as prehistoric and historic Ponca.
- Alternative 4 contains several burial mounds and a village. There are many resources at Ponca Creek confluence and associated bluffs.
- Existing alignment is better from an archeological impact perspective as some areas already impacted
- Advise staying away from bluffs on the west of Niobrara. An alternative route south out of Verdel that stays further south from bluffs would have the less frequency of archaeological resources.
- Don't cut connector roads through the edge of the bluffs.
- East of Niobrara – less archaeological issues.
- Need to maintain access to landowners.
- Need to consider archaeology in identification and use of borrow sites.

Lewis and Clark Trail:

- Would rather have the road out of the floodplain but are sensitive to Tribal issues
- Public access and recreation need to be considered in identifying alternatives.
- Works closely with NPS.
- Requested more information about sediment removal as it is interesting but complicated.

NDOR:

- Concerned about project delay and deteriorating conditions – poor road conditions, detours, bridge/road facilities.
- Stability of Alternatives 2 and 3.
- Landowner access, recreation, continuity with Highway 14.
- Relative to sediment removal, portions of N-12 would need to be rebuilt due to narrow road conditions and inability to accommodate wide loads.
- Asked if FHWA would be involved. It was explained that as there is no nexus to the project for Federal Highway Administration (no DOT funding); USACE became the lead federal agency due to need for a Section 404 permit. FHWA was asked to be a cooperating agency.

Ponca Tribe of Nebraska:

- Gravesites, known and unknown, are primary concern. Also would be considered with Tribal resources in identification of borrow areas.
- Ponca Tribe does not want an alternative that would change the road from existing route. This is due to plans the tribe has for the area.
- Suggest raising the road on a bridge or causeway.

Knox County:

- County doesn't want to maintain the existing road and re-affirmed their resolution to leave the road in its existing location.
- Slides and road stability are primary concerns.
- High water levels have killed large cottonwood trees from the Fort Randle Dam to the mouth of Niobrara. Loss of eagle habitat.
- Burials are prevalent in the bluffs.
- The County is rewriting comprehensive plan, based on the road in place at its existing location.
- Geology of the bluffs with the Pierre shale and bentonite layer is costly for construction and maintenance. Slides near Crofton cost 25-30k. Alternatives 3 and 4 will be problematic and the wetlands being impacted by Alternative 1 are man-made.

BIA:

- Burial sites, cultural and archaeological resources.
- Alternative 4 would include tribal ROW and easements and BIA can assist with that.
- Watershed issues, protection of well water for home sites.
- BIA would discuss with Santee Sioux on Alternatives 3 and 4 to see what is known about resources there.

Santee Sioux:

- Economic impact to the casino and gas station.
- Comfortable with Alternatives 1 and 2, do not support Alternatives 3 and 4.
- An 80 acre cemetery is in the corridor of Alternative 3.

Communicate next steps: HDR gave an overview of the EIS process (see EIS Schedule display board).

Action/Notes:

- NGPC may supply GIS data layer with conservation easement information.
- Evaluate another alternative route south out of Verdel.
- Provide more information about sediment removal to Lewis and Clark Trail representative.
- Evaluate an alternative uses a bridge or causeway for the portions of the road in wetlands or susceptible to flooding.
- Develop Scoping Summary Report

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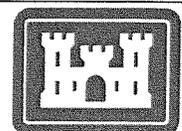
N-12 NIOBRARA EAST & WEST PROJECT

Agency Meeting Sign-In

Meeting Date: August 28, 2008

Meeting Location: WFLA Conference Center, Niobrara, Nebraska

Check here to be added to the project mailing list:	Name	Representing	Complete Mailing Address
<input checked="" type="checkbox"/>	Zach Nelson	U.S. Senator Ben Nelson	P.O. Box 791 S. Sioux City, NE 68776
<input checked="" type="checkbox"/>	Alicia F. Abbott	US Senator Ben Nelson	4110 N. 87th Lincoln, NE 68505
<input checked="" type="checkbox"/>	Mike Crowley	Santee Sioux Nation	52948 Hwy 12 Niobrara, NE 68760
<input checked="" type="checkbox"/>	Theresa Smydra	Missouri River Futures & NRCS	102 E. Elm Hartington, NE 68739
<input checked="" type="checkbox"/>	Ted LaGrange	NGPC	P.O. Box 30370 Lincoln, NE 68503
<input checked="" type="checkbox"/>	Scott Wessel	NGPC	2201 N 13th Norfolk, NE 68701
<input checked="" type="checkbox"/>	Lucas Negus	NGPC	PO Box 44 Royal, NE 68773
<input checked="" type="checkbox"/>	Neal Bedlan	NPS	601 Apartment Drive Omaha, NE 68102
<input checked="" type="checkbox"/>	Julia Sage	Ponca Tribe of NE	PO Box 2588 Niobrara, NE 68760
<input type="checkbox"/>	Roylin Swanson	Knox County Supervisor	88841 521 Ave Niobrara, NE 68760
<input checked="" type="checkbox"/>	Virgil Miller	Knox County SUPERVISOR	Box 101 Verdigre, NE 68783
<input checked="" type="checkbox"/>	Laura Hintz	Knox County Emergency Management	P.O. Box 165 Center, NE 68724
<input checked="" type="checkbox"/>	Liz Doerr	Knox Co. Zoning & Flood Plains Admin	"
<input type="checkbox"/>			





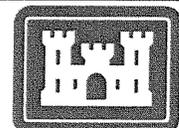
N-12 NIOBRARA EAST & WEST PROJECT

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Meeting Location: WFLA Conference Center, Niobrara, Nebraska

Check here to be added to the project mailing list:	Name	Representing	Complete Mailing Address
<input checked="" type="checkbox"/>	Carey Grell	NGPC	2200 N. 33rd Lincoln, NE 68503
<input checked="" type="checkbox"/>	Terry Hickman	NDEQ	POB 98922 Lincoln, NE 68509
<input checked="" type="checkbox"/>	Michael Madell	NPS	PO Box 666 Yankton SD 57078
<input checked="" type="checkbox"/>	Wayne Wotawista	NPS	POB 591 O'Neill, NE 68763
<input checked="" type="checkbox"/>	Brooke Stanberry	USFWS	203 W 2nd ST Fed Bldg Grand Island, NE 68801
<input checked="" type="checkbox"/>	Terry Steiwacher	NSHPD	P.O. Box 304 Crawford, NE 69339
<input checked="" type="checkbox"/>	John Ludwickson	Nebraska State Historical Society (Archaeologist)	1500 4th STREET LINCOLN NE 68501-2554
<input checked="" type="checkbox"/>	Kristal Stoner	NGPC	2200 N 33rd St Lincoln, NE 68503
<input checked="" type="checkbox"/>	Gary Ledbetter	Gavins Point Project Corps	P.O. Box 710 Yankton, SD 57078
<input checked="" type="checkbox"/>	Denise Nelson	NPS Lewis & Clark NHT	601 Riverfront Dr. 102 Omaha, NE 68103
<input checked="" type="checkbox"/>	Scott Brummond	NDOR	P.O. Box 426 Wayne, NE 68787
<input checked="" type="checkbox"/>	Rob Davis	NDOR	PO Box 1707 Norfolk, NE 68702-1707
<input type="checkbox"/>			





N-12 NIOBRARA EAST & WEST PROJECT

Agency Meeting Sign-In

Meeting Date: August 28, 2008

Meeting Location: WFLA Conference Center, Niobrara, Nebraska

Check here to be added to the project mailing list:	Name	Representing	Complete Mailing Address
<input type="checkbox"/>	Wyatt Webster	NDOR	1500 Highway 2 Lincoln, NE 68509
<input type="checkbox"/>	JASON JURGENS	NDOR	1500 HIGHWAY 2 LINCOLN, NE 68509
<input type="checkbox"/>	Randy Peters	NDOR	" "
<input type="checkbox"/>	John Moeschen	USACE	8901 South 154th St Omaha, NE 68138
<input type="checkbox"/>	Rodney J Schwarz	USACE	" "
<input type="checkbox"/>	MATT WRAY	USACE	8901 South 154 St Omaha, NE 68138
<input checked="" type="checkbox"/>	Tris Wynn	PE NDOR-D3	P.O. Box 1707 Norfolk, NE 68702-1707
<input type="checkbox"/>	MONICA FLORES	BIA-Winnebago Agency	Rt. 1 Box 18 Winnebago, NE 68071
<input type="checkbox"/>	Ernest Powler	BIA Winnebago, NE	" "
<input checked="" type="checkbox"/>	Tamara Poiter	BIA, Superintendent Winnebago NE	" " "
<input type="checkbox"/>	Don Turek	NDOR	1500 Hwy 2 Lincoln, NE 68509-4795
<input type="checkbox"/>	Sara Porter	NDOR	" "
<input checked="" type="checkbox"/>	LEN SAND	NDOR	" "
<input type="checkbox"/>			





N-12 NIOBRARA EAST & WEST PROJECT

Agency Meeting Agenda

Meeting Date: August 28, 2008

Meeting Location: WFLA Conference Center, Niobrara, Nebraska

1. Introduction
2. Project history
3. Detail range of alternatives
4. Discuss issues identified during past coordination
5. Identify new agency issues
6. Communicate next steps

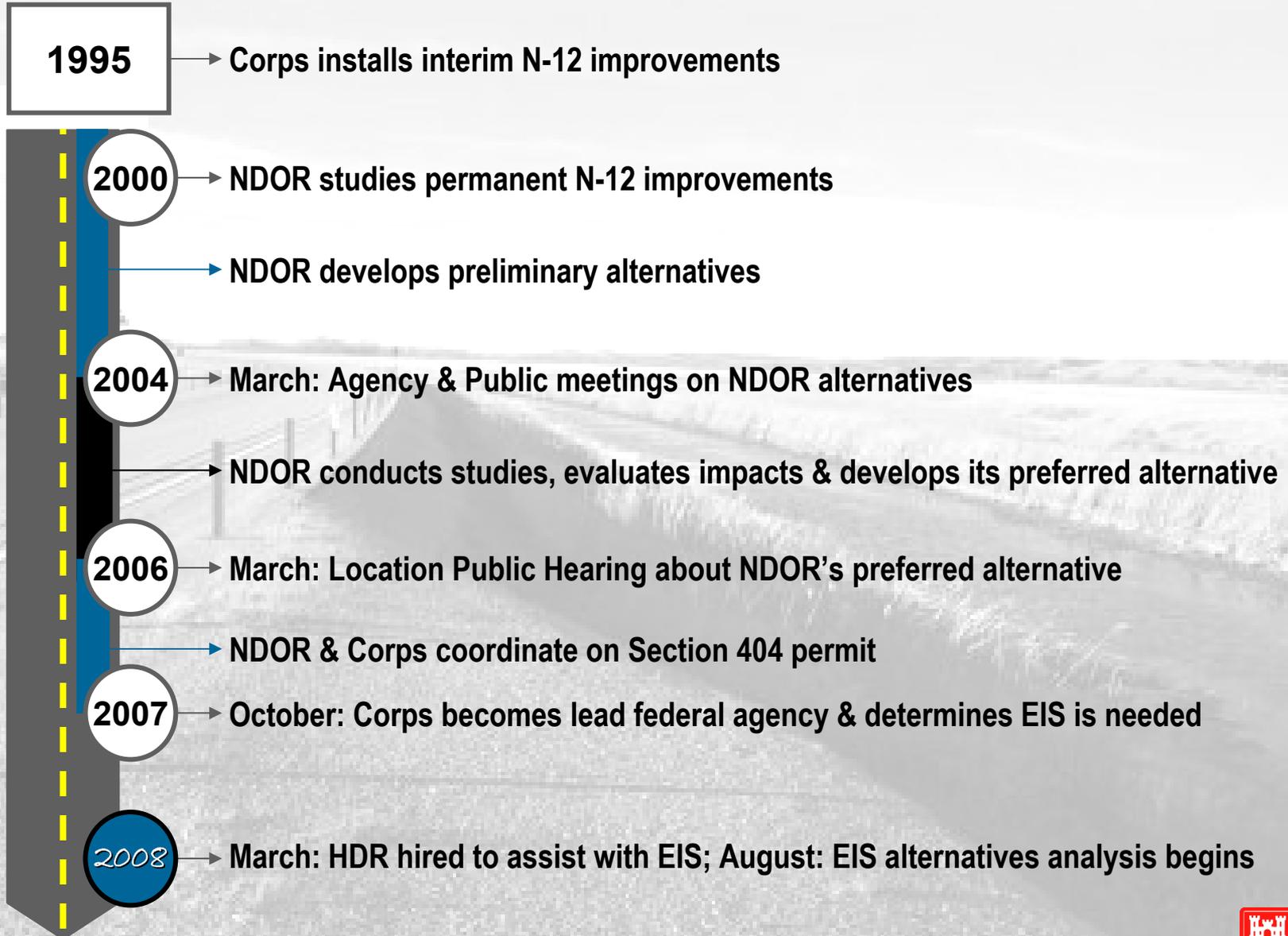


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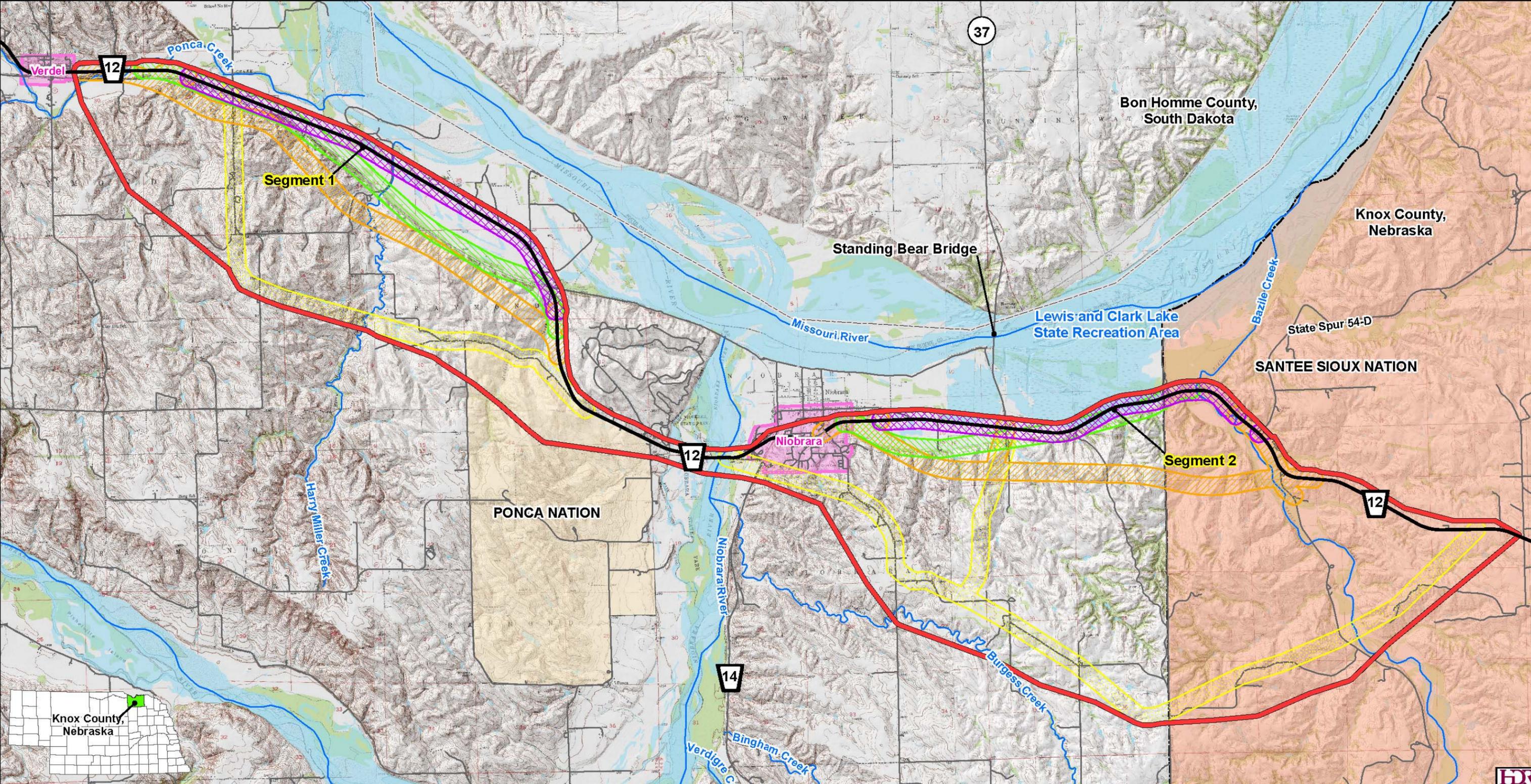


N-12 NIOBRARA EAST & WEST PROJECT

PROJECT HISTORY



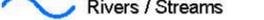
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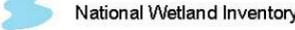


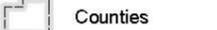
Preliminary Alternative Study Corridors

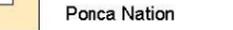
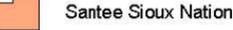
-  Alternative 1 Study Corridor
-  Alternative 2 Study Corridor
-  Alternative 3 Study Corridor
-  Alternative 4 Study Corridor

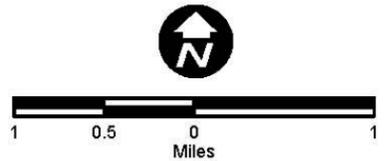
Legend

-  Nebraska Highway 12
-  Roads
-  Rivers / Streams

-  National Wetland Inventory
-  Study Area

-  Corporate Limits
-  Counties

- Reservation**
-  Ponca Nation
-  Santee Sioux Nation



Project Location Map

Nebraska State Highway 12
 Knox County, Nebraska
 Environmental Impact Statement

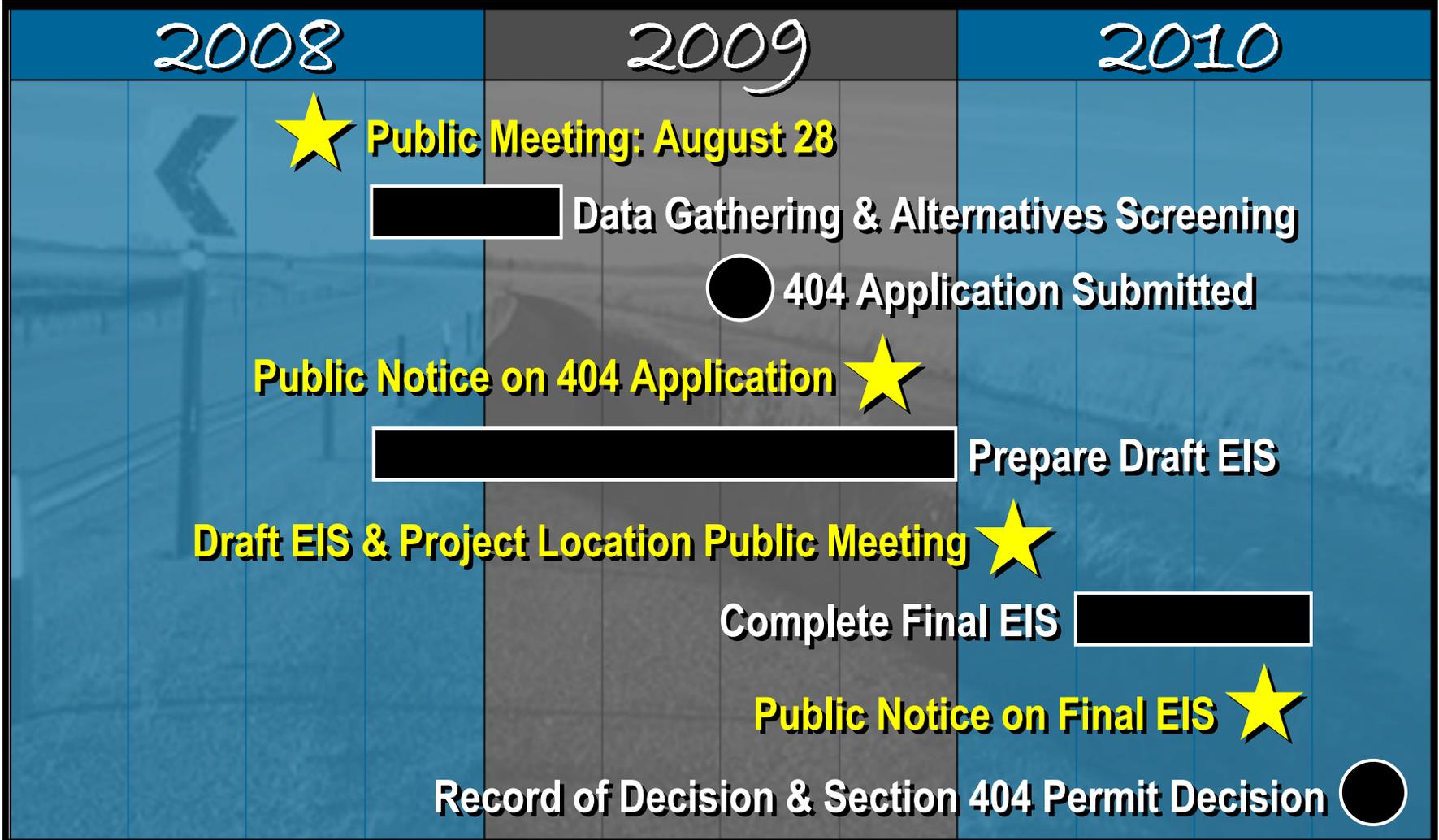


FDR

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EIS SCHEDULE



★: Formal Opportunity for Public Comment/Involvement. Note: Public Input Welcome Throughout Process.



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Hughes, Ruth Ellen

From: Scheinost, Steve - Lincoln, NE <Steve.Scheinost@ne.usda.gov>
Sent: Monday, August 11, 2008 11:52 AM
To: Pillard, Matt
Subject: FPPA Response; Knox Co. Nebraska Hwy-12
Attachments: Farmland_ClassificationSegment1.pdf; Farmland_ClassificationSegment2.pdf; CPA106.pdf



Mr. Matthew Pillard, AICP
Project Manager

I have reviewed NDOR Project No. S-12-5(1011), C.N. 31674, Highway 12 in Knox County. I am providing you for your information two maps, one for each segment, of the areas of Prime Farmland. I am also attaching a form for your use when final plans of the area are made.

Please call if you have any questions.

Steve Scheinost
Asst. State Soil Scientist
USDA-NRCS
Fed. Bldg. Rm. 152
100 Centennial Mall North
Lincoln, NE. 68508-3866
402.437.4117

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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Soil Ratings

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

Political Features

Municipalities

-  Cities
-  Urban Areas

Water Features

-  Oceans
-  Streams and Canals

Transportation

-  Rails
- Roads**
-  Interstate Highways
-  US Routes
-  State Highways
-  Local Roads
-  Other Roads

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 14N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Knox County, Nebraska
Survey Area Data: Version 5, Dec 14, 2007

Date(s) aerial images were photographed: 5/4/1993; 5/13/1993

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Farmland Classification— Summary by Map Unit — Knox County, Nebraska				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
2327	Inavale fine sandy loam, rarely flooded	Farmland of statewide importance	17.5	0.3%
2561	Eltree silt loam, 0 to 3 percent slopes	All areas are prime farmland	44.4	0.7%
2563	Eltree silt loam, 3 to 6 percent slopes	All areas are prime farmland	89.2	1.3%
3151	Bristow silty clay, 30 to 60 percent slopes	Not prime farmland	334.2	4.9%
3221	Labu silty clay, 6 to 11 percent slopes	Not prime farmland	759.5	11.1%
3227	Labu-Sansarc complex, 11 to 30 percent slopes	Not prime farmland	1,386.5	20.3%
3232	Lynch-Bristow complex, 11 to 30 percent slopes	Not prime farmland	158.9	2.3%
3235	Lynch-Verdel complex, 6 to 11 percent slopes	Not prime farmland	556.3	8.2%
3259	Meadin-O'Neill complex, 2 to 30 percent slopes	Not prime farmland	21.2	0.3%
3321	Sansarc silty clay, 30 to 60 percent slopes	Not prime farmland	64.7	0.9%
3327	Verdel silty clay, 0 to 2 percent slopes	All areas are prime farmland	72.4	1.1%
3328	Verdel silty clay, 2 to 6 percent slopes	All areas are prime farmland	97.3	1.4%
3329	Verdel silty clay, 6 to 11 percent slopes	Not prime farmland	67.0	1.0%
3330	Verdigre fine sandy loam, 11 to 30 percent slopes	Not prime farmland	16.9	0.2%
3336	Verdigre loam, 6 to 11 percent slopes	Not prime farmland	69.2	1.0%
3337	Verdigre loam, 11 to 30 percent slopes	Not prime farmland	48.3	0.7%
3617	Solomon silty clay, occasionally flooded	Prime farmland if drained	78.3	1.1%
3642	Kezan silt loam, occasionally flooded	Not prime farmland	56.9	0.8%
3926	Solomon silty clay, rarely flooded	Prime farmland if drained	86.1	1.3%
4352	Elsmere fine sandy loam, rarely flooded	Not prime farmland	11.0	0.2%

Farmland Classification— Summary by Map Unit — Knox County, Nebraska				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6300	Aowa silt loam, occasionally flooded	All areas are prime farmland	252.1	3.7%
6301	Aowa silt loam, channeled, frequently flooded	Not prime farmland	135.6	2.0%
6369	Orwet loam, rarely flooded	Not prime farmland	4.1	0.1%
6457	Inglewood loamy fine sand, rarely flooded	Not prime farmland	4.0	0.1%
6550	Sardak loamy fine sand, 2 to 11 percent slopes, very rare flooding	Not prime farmland	8.1	0.1%
6600	Alcester silt loam, 2 to 6 percent slopes	All areas are prime farmland	9.5	0.1%
6601	Alcester silt loam, 6 to 11 percent slopes	Farmland of statewide importance	11.9	0.2%
6605	Bazile loam, 2 to 6 percent slopes	All areas are prime farmland	2.4	0.0%
6673	Crofton silt loam, 11 to 17 percent slopes, eroded	Not prime farmland	142.2	2.1%
6680	Crofton silt loam, 17 to 30 percent slopes	Not prime farmland	224.4	3.3%
6694	Crofton-Nora complex, 6 to 11 percent slopes, eroded	Not prime farmland	41.0	0.6%
6726	Thurman fine sandy loam, 11 to 30 percent slopes	Not prime farmland	127.9	1.9%
6727	Thurman fine sandy loam, 2 to 11 percent slopes	Not prime farmland	21.9	0.3%
6761	Gavins silt loam, 30 to 60 percent slopes	Not prime farmland	242.2	3.6%
6765	Nora silty clay loam, 2 to 6 percent slopes	All areas are prime farmland	0.7	0.0%
6767	Nora silty clay loam, 6 to 11 percent slopes	Farmland of statewide importance	14.4	0.2%
6789	Crofton-Nora complex, 11 to 17 percent slopes, eroded	Not prime farmland	38.6	0.6%
6828	Redstoe silt loam, 6 to 11 percent slopes	Not prime farmland	11.4	0.2%
6829	Redstoe-Gavins complex, 11 to 30 percent slopes	Not prime farmland	9.0	0.1%
6845	Ortello fine sandy loam, 3 to 6 percent slopes	All areas are prime farmland	4.7	0.1%
7710	Albaton silty clay, occasionally flooded	Not prime farmland	192.3	2.8%

Farmland Classification— Summary by Map Unit — Knox County, Nebraska				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
7711	Albaton silty clay, frequently flooded	Not prime farmland	6.0	0.1%
7765	Blyburg silt loam, rarely flooded	All areas are prime farmland	0.4	0.0%
7804	Percival silty clay, rarely flooded	Prime farmland if drained	30.8	0.5%
8420	Boel loamy fine sand, occasionally flooded	Not prime farmland	52.5	0.8%
8470	Gibbon silt loam, occasionally flooded	Prime farmland if drained	153.7	2.3%
8931	Simeon sand, 6 to 30 percent slopes, eroded	Not prime farmland	139.4	2.0%
9900	Fluvaquents, frequently flooded	Not prime farmland	848.1	12.4%
9983	Gravel pit	Not prime farmland	9.3	0.1%
9999	Water	Not prime farmland	40.9	0.6%
Totals for Area of Interest (AOI)			6,815.0	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

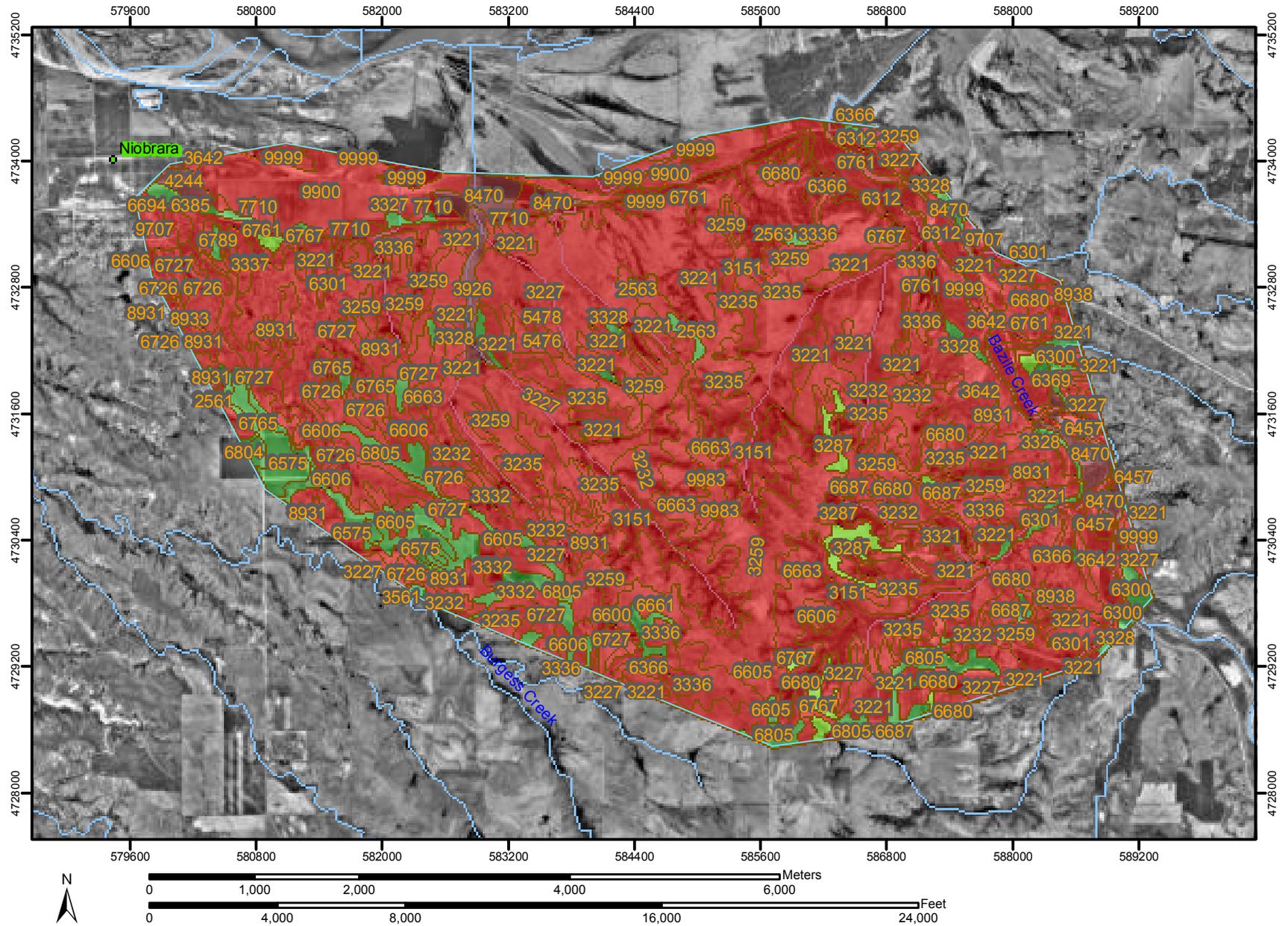
Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

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Farmland Classification—Knox County, Nebraska
(Knox Co Hwy N-12, Segment 2)



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Soil Ratings

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-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
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-  Farmland of local importance
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Political Features

Municipalities

-  Cities
-  Urban Areas

Water Features

-  Oceans
-  Streams and Canals

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Coordinate System: UTM Zone 14N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Knox County, Nebraska
Survey Area Data: Version 5, Dec 14, 2007

Date(s) aerial images were photographed: 5/4/1993; 3/22/1994

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Farmland Classification

Farmland Classification— Summary by Map Unit — Knox County, Nebraska				
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2322	Inavale fine sand, channeled, frequently flooded	Not prime farmland	8.1	0.1%
2327	Inavale fine sandy loam, rarely flooded	Farmland of statewide importance	7.7	0.1%
2561	Eltree silt loam, 0 to 3 percent slopes	All areas are prime farmland	20.6	0.2%
2563	Eltree silt loam, 3 to 6 percent slopes	All areas are prime farmland	26.0	0.3%
3151	Bristow silty clay, 30 to 60 percent slopes	Not prime farmland	509.0	5.2%
3221	Labu silty clay, 6 to 11 percent slopes	Not prime farmland	586.8	6.0%
3227	Labu-Sansarc complex, 11 to 30 percent slopes	Not prime farmland	2,505.8	25.5%
3232	Lynch-Bristow complex, 11 to 30 percent slopes	Not prime farmland	348.2	3.5%
3235	Lynch-Verdel complex, 6 to 11 percent slopes	Not prime farmland	492.5	5.0%
3259	Meadin-O'Neill complex, 2 to 30 percent slopes	Not prime farmland	557.6	5.7%
3287	Paka loam, 6 to 11 percent slopes, eroded	Farmland of statewide importance	63.6	0.6%
3321	Sansarc silty clay, 30 to 60 percent slopes	Not prime farmland	19.3	0.2%
3327	Verdel silty clay, 0 to 2 percent slopes	All areas are prime farmland	11.9	0.1%
3328	Verdel silty clay, 2 to 6 percent slopes	All areas are prime farmland	102.2	1.0%
3332	Verdigre fine sandy loam, 6 to 11 percent slopes	Not prime farmland	43.9	0.4%
3336	Verdigre loam, 6 to 11 percent slopes	Not prime farmland	93.7	1.0%
3337	Verdigre loam, 11 to 30 percent slopes	Not prime farmland	16.0	0.2%
3561	Hobbs silt loam, occasionally flooded	All areas are prime farmland	11.9	0.1%
3642	Kezan silt loam, occasionally flooded	Not prime farmland	93.1	0.9%
3926	Solomon silty clay, rarely flooded	Prime farmland if drained	50.6	0.5%

Farmland Classification— Summary by Map Unit — Knox County, Nebraska				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
4244	Ord loam, occasionally flooded	Prime farmland if drained	24.3	0.2%
5476	Betts clay loam, 15 to 30 percent slopes	Not prime farmland	17.1	0.2%
5478	Betts clay loam, 6 to 11 percent slopes, eroded	Not prime farmland	11.7	0.1%
6300	Aowa silt loam, occasionally flooded	All areas are prime farmland	39.9	0.4%
6301	Aowa silt loam, channeled, frequently flooded	Not prime farmland	45.1	0.5%
6312	Barney loam, frequently flooded	Not prime farmland	218.3	2.2%
6366	Obert silt loam, occasionally flooded	Not prime farmland	61.8	0.6%
6369	Orwet loam, rarely flooded	Not prime farmland	24.5	0.2%
6385	Shell silt loam, occasionally flooded	All areas are prime farmland	25.7	0.3%
6457	Inglewood loamy fine sand, rarely flooded	Not prime farmland	36.3	0.4%
6500	Bazile loam, 0 to 2 percent slopes	All areas are prime farmland	5.0	0.1%
6575	Trent silt loam, 0 to 2 percent slopes	All areas are prime farmland	74.1	0.8%
6600	Alcester silt loam, 2 to 6 percent slopes	All areas are prime farmland	28.8	0.3%
6605	Bazile loam, 2 to 6 percent slopes	All areas are prime farmland	184.3	1.9%
6606	Bazile loam, 6 to 11 percent slopes	Not prime farmland	54.9	0.6%
6661	Brunswick-Paka complex, 6 to 17 percent slopes	Not prime farmland	147.2	1.5%
6663	Brunswick-Paka complex, 17 to 30 percent slopes	Not prime farmland	620.8	6.3%
6680	Crofton silt loam, 17 to 30 percent slopes	Not prime farmland	281.3	2.9%
6687	Crofton silt loam, 6 to 11 percent slopes, eroded	Not prime farmland	41.4	0.4%
6694	Crofton-Nora complex, 6 to 11 percent slopes, eroded	Not prime farmland	16.8	0.2%
6726	Thurman fine sandy loam, 11 to 30 percent slopes	Not prime farmland	282.9	2.9%

Farmland Classification— Summary by Map Unit — Knox County, Nebraska				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6727	Thurman fine sandy loam, 2 to 11 percent slopes	Not prime farmland	489.8	5.0%
6758	Nora silty clay loam, 11 to 17 percent slopes	Not prime farmland	4.0	0.0%
6761	Gavins silt loam, 30 to 60 percent slopes	Not prime farmland	224.8	2.3%
6765	Nora silty clay loam, 2 to 6 percent slopes	All areas are prime farmland	59.2	0.6%
6767	Nora silty clay loam, 6 to 11 percent slopes	Farmland of statewide importance	44.1	0.4%
6789	Crofton-Nora complex, 11 to 17 percent slopes, eroded	Not prime farmland	15.8	0.2%
6804	Moody loam, 0 to 2 percent slopes	All areas are prime farmland	11.2	0.1%
6805	Moody loam, 2 to 6 percent slopes	All areas are prime farmland	145.5	1.5%
6829	Redstoe-Gavins complex, 11 to 30 percent slopes	Not prime farmland	5.3	0.1%
7710	Albaton silty clay, occasionally flooded	Not prime farmland	63.2	0.6%
8470	Gibbon silt loam, occasionally flooded	Prime farmland if drained	141.8	1.4%
8931	Simeon sand, 6 to 30 percent slopes, eroded	Not prime farmland	198.1	2.0%
8933	Simeon sandy loam, 0 to 6 percent slopes	Not prime farmland	15.1	0.2%
8938	Simeon-Thurman complex, 6 to 30 percent slopes	Not prime farmland	23.9	0.2%
9707	Urban land, 3 to 30 percent slopes	Not prime farmland	40.8	0.4%
9900	Fluvaquents, frequently flooded	Not prime farmland	396.1	4.0%
9967	Sanitary landfill	Not prime farmland	2.3	0.0%
9983	Gravel pit	Not prime farmland	4.7	0.0%
9999	Water	Not prime farmland	142.2	1.4%
Totals for Area of Interest (AOI)			9,838.2	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

**FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS**

PART I (To be completed by Federal Agency)	3. Date of Land Evaluation Request	4. Sheet 1 of _____
---------------------------------------------------	------------------------------------	---------------------

1. Name of Project	5. Federal Agency Involved
--------------------	----------------------------

2. Type of Project	6. County and State
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PART II (To be completed by NRCS)	1. Date Request Received by NRCS	2. Person Completing Form
------------------------------------------	----------------------------------	---------------------------

3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input type="checkbox"/> NO <input type="checkbox"/>	4. Acres Irrigated Average Farm Size
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------

5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: _____ %	7. Amount of Farmland As Defined in FPPA Acres: _____ %
------------------	---------------------------------------------------------------	------------------------------------------------------------

8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS
----------------------------------------	-----------------------------------------	-------------------------------------------

PART III (To be completed by Federal Agency)	Alternative Corridor For Segment			
-----------------------------------------------------	-----------------------------------------	--	--	--

	Corridor A	Corridor B	Corridor C	Corridor D
--	------------	------------	------------	------------

A. Total Acres To Be Converted Directly				
-----------------------------------------	--	--	--	--

B. Total Acres To Be Converted Indirectly, Or To Receive Services				
-------------------------------------------------------------------	--	--	--	--

C. Total Acres In Corridor				
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PART IV (To be completed by NRCS) Land Evaluation Information				
----------------------------------------------------------------------	--	--	--	--

A. Total Acres Prime And Unique Farmland				
------------------------------------------	--	--	--	--

B. Total Acres Statewide And Local Important Farmland				
-------------------------------------------------------	--	--	--	--

C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
-------------------------------------------------------------------------	--	--	--	--

D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
------------------------------------------------------------------------------------	--	--	--	--

PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)				
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PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))	Maximum Points			
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1. Area in Nonurban Use	15			
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2. Perimeter in Nonurban Use	10			
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3. Percent Of Corridor Being Farmed	20			
-------------------------------------	----	--	--	--

4. Protection Provided By State And Local Government	20			
------------------------------------------------------	----	--	--	--

5. Size of Present Farm Unit Compared To Average	10			
--------------------------------------------------	----	--	--	--

6. Creation Of Nonfarmable Farmland	25			
-------------------------------------	----	--	--	--

7. Availability Of Farm Support Services	5			
------------------------------------------	---	--	--	--

8. On-Farm Investments	20			
------------------------	----	--	--	--

9. Effects Of Conversion On Farm Support Services	25			
---------------------------------------------------	----	--	--	--

10. Compatibility With Existing Agricultural Use	10			
--------------------------------------------------	----	--	--	--

TOTAL CORRIDOR ASSESSMENT POINTS	160			
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PART VII (To be completed by Federal Agency)				
-----------------------------------------------------	--	--	--	--

Relative Value Of Farmland (From Part V)	100			
------------------------------------------	-----	--	--	--

Total Corridor Assessment (From Part VI above or a local site assessment)	160			
---------------------------------------------------------------------------	-----	--	--	--

TOTAL POINTS (Total of above 2 lines)	260			
----------------------------------------------	------------	--	--	--

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>
-----------------------	---------------------------------------------------------	-----------------------	------------------------------------------------------------------------------------------------------

5. Reason For Selection:

Signature of Person Completing this Part:	DATE
-------------------------------------------	------

NOTE: Complete a form for each segment with more than one Alternate Corridor

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

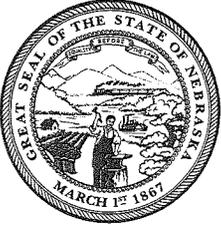
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points



Dave Heineman
Governor

STATE OF NEBRASKA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Michael J. Linder

Director
Suite 400, The Atrium
1200 'N' Street
P.O. Box 98922
Lincoln, Nebraska 68509-8922
Phone (402) 471-2186
FAX (402) 471-2909
website: www.deq.state.ne.us

August 21, 2008

Matt Pillard
HDR Engineering, Inc.
8404 Indian Hills Drive
Omaha, NE 68114-4098

RE: Agency Scoping, Nebraska Highway 12 – Environmental Impact Statement, Permit No. 2004-10258-WEH, NDOR Project No. S-12-5(1011), C.N. 31674, Knox County, Nebr.

Dear Mr. Pillard:

The Nebraska Department of Environmental Quality (NDEQ) has been asked to review the above referenced project. Due to a possible impact on waters of the U.S., we recommend you contact John Moeschel, U.S. Army Corps of Engineers, (402) 896-0896, regarding the possible need for a 404 permit.

As with any activity, permits may be required prior to beginning construction or operation. At minimum, you should be aware of the possible requirement for a Construction Storm Water permit. Information regarding this type of permit can be received from Ron Asch at (402) 471-2188.

Until further along in the planning process, it is unknown whether there may be additional regulatory requirements. We strongly urge the project sponsors to make contact with the Department. It has been our experience that early and open communication helps facilitate the permitting process.

If you have questions about the permitting process, or any other questions, feel free to contact me at (402) 471-8697. For more information, please visit our website at www.deq.state.ne.us.

Sincerely,

Hugh Stirts, PhD
NEPA Coordinator



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
106 SOUTH 15TH STREET
OMAHA NE 68102-1618

August 22, 2008

Hydrologic Engineering Branch

Mr. Matt Pillard, Project manager
HDR Engineering, Inc.
8404 Indian Hills Drive
Omaha, Nebraska 68114-4098

Dear Mr. Pillard:

Thank you for the invitation to the scoping meeting regarding the proposed Nebraska State Highway 12 Niobrara East and West project by the Nebraska Department of Roads. This office has provided general floodplain comments regarding this proposed project to Mr. Matt Wray of the Omaha Districts Regulatory Wehrspann Field Office.

Although we will be unable to attend the scoping meeting on August 28th, 2008, please include this office in future floodplain issues that should arise regarding this project.

If you have any questions, please contact Mr. Jody Ruckman of my staff at (402) 995-2327.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Behm".

Randall L. Behm, P. E., CFM
Chief, Flood Risk & Floodplain
Management Section
Engineering Division

Hughes, Ruth Ellen

From: Cothern.Joe@epamail.epa.gov
Sent: Monday, August 25, 2008 1:37 PM
To: Pillard, Matt
Cc: Brandner.Wolfgang@epamail.epa.gov; Flournoy.Luetta@epamail.epa.gov; Holder.Stanley@epamail.epa.gov; Ousley.Jennifer@epamail.epa.gov
Subject: Re: Nebraska Highway 12 - Agency Scoping Meeting
Attachments: pic20170.jpg; pic05450.jpg; pic27182.jpg; pic07301.gif

Matt,

Regrettably, due to work conflicts, I will not be attending the agency scoping meeting this week. However, Jennifer Ousley will be able to participate from the Water Division. A quick scan of EPA's GIS holdings indicates a public drinking water supply well adjacent to Hwy 12 on the Santee Sioux Reservation (see attached map). No Superfund or RCRA corrective action sites were identified within the study area boundaries.

I would like to also confirm that EPA will be a formal Cooperating Agency under NEPA for this project.

Best Regards,
Joe

Joseph E. Cothern
NEPA Team Leader
U.S. Environmental Protection Agency
Region 7 - Kansas City
(913) 551-7148
cothern.joe@epa.gov

|
|
| Nebraska Highway 12 Improvements |
|
| (Embedded image moved to file: pic20170.jpg) |
| (Embedded image moved to file: pic05450.jpg) |
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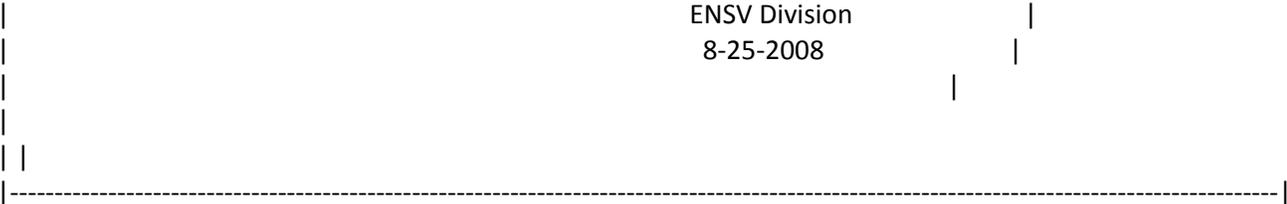
| NOTE: The Environmental Protection Agency does not guarantee the accuracy, completeness, or timeliness of the information shown, and shall |

| not be liable for any loss or injury resulting from reliance upon the information shown. |

| (Embedded image moved to file: pic27182.jpg)Legend |

| (Embedded image moved to file: pic07301.gif)EPA Region 7 Logo |

| REGION 7 |





United States Department of the Interior

NATIONAL PARK SERVICE

Headquarters

Missouri National Recreational River

Niobrara National Scenic River

P.O. Box 591

O'Neill, Nebraska 68763

IN REPLY REFER TO:

L6019 (MNRR)

September 12, 2008



Matt Wray
U.S. Army Corps of Engineers,
Nebraska Field Office – Wehrspann,
8901 S. 154th St.
Omaha, Nebraska 68138

RE: Cooperating Agency Status for 2004-10258-WEH-NE-12 Niobrara East and West

Dear Mr. Wray:

This is in response to your invitation for the National Park Service to become a Cooperating Agency concerning the Highway 12 planning and NEPA process along the 39-Mile District of the Missouri National Recreational River (MNRR) and Lewis and Clark National Historic Trail (LECL), by Niobrara, Nebraska. National Park Service (NPS) staff from the MNRR, LECL, and Midwest Regional Office are all very interested in the progression of this project and wish to be involved with it.

In accordance with the provisions set out in 40 CFR 1501.6 of the Council on Environmental Quality regulations, we accept the invitation to become a Cooperating Agency and appoint Michael Madell as a point of contact (POC). As a Cooperating Agency, our policies require that a Memorandum of Understanding be put in place between the Lead Agency and the cooperating agencies that outlines the roles, responsibilities and schedules that will be necessary to complete this work on time.

As a Cooperating Agency, the NPS will:

1. Assist in the identification of significant resources that are critical to the preservation and protection of the MNRR and LECL, pursuant to the Organic Act of 1916 and the Wild and Scenic Rivers Act (Act) of 1968, as amended, National Historic Trails Act of 1978, as amended, and our General Management Plan.
2. Provide appropriate existing resource inventories with respect to MNRR and LECL resources, including natural/cultural/historic landscape data **that becomes available during** project planning; identify resource and project data that will be

- required to fully understand potential impacts to the MNRR and LECL associated with the proposed project.
3. Provide timely internal review comments on review of documents, including internal agency review drafts and public review drafts. Reviews will include an interdisciplinary team of NPS staff, as appropriate.
 4. Provide assistance in assessing impacts to resources and assistance in developing impact threshold assessments including quantifiable impact definitions (minor, moderate, major) to describe the intensity of impacts, particularly for specific MNRR and LECL resources and outstandingly remarkable values (ORVs).
 5. Provide appropriate strategies, including identification of strategies/options that would likely result in a positive Section 7(a) review.
 6. Identify a project POC and notify the USACE should the POC change. The POC will track project status and information requests; attend meetings together with appropriate NPS staff, ensure timely submission of review comments and notify the USACE in the event of unanticipated delays.

The NPS has been involved in discussions concerning this project for several years. As a result of those discussions and several site visits some initial concerns have been identified. In an effort to facilitate the initial planning process, I would like to identify some of those key issues at this time, for the record.

NPS initial concerns:

- 1) We do not believe consideration of all feasible and prudent alternatives have been presented. As discussed previously and again at the latest scoping meeting, an alternative that considers “bridging” all, or at a minimum, a critical portion of the highway should be included in the alternative analysis. The critical portion alternative should take into consideration hydrologic connectivity as well as wildlife movements in the area.
- 2) If an alternative utilizing the existing alignment is chosen, NPS would like to see the project use the existing road and base so that any new impacts to wetlands would be significantly reduced. NPS is concerned with filling existing wetlands and leaving the old roadway un-reclaimed. By placing the new roadway on top of the old, the impacts are reduced significantly. Leaving the old roadway would present an eyesore in a Wild and Scenic River, where the Recreational ORV includes the aesthetic qualities of the river. The compacted area with foreign material (road base) may take decades to establish into some kind of desirable vegetation. It would also create an area of possible invasion for noxious weeds.
- 3) Connectivity of wetlands on both sides of the highway, not just for wetland/hydrology sake, but also for the species utilizing the area (fish, frogs, salamanders, turtles, waterfowl, etc.). There has been some discussion about connecting existing tubes/culverts from the old highway to the new proposed highway. For maintaining proper hydrology in the area this approach may be satisfactory. However, it is questionable if most critters utilize underground crossing of the length of culvert/tube expected (~150’ or more). The Federal Highway Administration has an excellent website that gives examples of

linking habitats to reduce roadkill which can be found at:
<http://www.fhwa.dot.gov/environment/wildlifecrossings/>

- 4) Wetland losses. These wetlands contribute significantly to the MNRR's ORVs. Reducing the amount of wetlands lost, and mitigating the necessary losses to wetlands is of a high concern. If wetland mitigations are necessary, NPS would like to be intimately involved in the selection and development of these sites.
- 5) Pollutants. We have concern about highway pollutants running into the wetlands in this area. For much of the year this area is a near "stagnant" wetland. This allows contaminants to accumulate so that when flow is reestablished there may be high concentrations entering the system. These backwater and temporarily disconnected systems are also important reproductive areas for "feeder" fish. The concentration of contaminants may adversely impact these natural processes.
- 6) Safety. We anticipate increased use of this area in the future. Turnout lanes for both east and west traffic at the intersection to the Chief Standing Bear bridge crossing seems prudent.
- 7) If riprap is required for this project, it should be natural rock (not broken concrete) and follow general conditions for 404 permits on the MNRR which include covering with topsoil, seeding, and etc.
- 8) Recreation. People currently using the roadway are frequently slowing down or stopping to gawk at scenery or wildlife in the area. Several "pull-outs" should be incorporated into the roadway to facilitate public enjoyment of the area. As an initial discussion point, I'd suggest 4 east of town and 4 west of town.

Again, questions pertaining to the NPS's involvement with the Niobrara East and West project should be directed to Michael Madell, Superintendent, Missouri National Recreational River, P.O. Box 666, Yankton, South Dakota, 57078, phone 605-214-3389.

Sincerely,



R. Michael Madell
Superintendent

Cc: NPS-MWRO, Santiago
NPS-L&CNHT, Wiley
USFWS, Harms

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Hughes, Ruth Ellen

From: Wayne_Werkmeister@nps.gov
Sent: Thursday, September 18, 2008 9:47 AM
To: Pillard, Matt; Matt.T.Wray@usace.army.mil
Cc: michael_madell@nps.gov
Subject: Nebraska Highway 12 EIS
Attachments: CoopAgency.pdf

I just received your letter concerning scoping and comments on the above project. We included a new but critical addition in our response to your request for Cooperating Agency status and I just wanted to reiterate it so that it does not get lost. From item #1 under NPS Initial Concerns:

"We do not believe consideration of all feasible and prudent alternatives have been presented. As discussed previously and again at the latest scoping meeting, an alternative that considers "bridging" all, or at a minimum, a critical portion of the highway should be included in the alternative analysis. The critical portion alternative should take into consideration hydrologic connectivity as well as wildlife movements in the area."

A copy of our response is attached for reference.

Missouri National Recreational River
Chief of Resources Management
PO Box 591
O'Neill, NE 68763
Office (402) 336-3970
Mobile (402) 394-7351
FAX 336-3981

Hughes, Ruth Ellen

From: Ousley.Jennifer@epamail.epa.gov
Sent: Monday, September 22, 2008 10:13 AM
To: Pillard, Matt
Cc: Cothorn.Joe@epamail.epa.gov; Chamberlain.Eliodora@epamail.epa.gov; Horchem.Brad@epamail.epa.gov
Subject: RE: N-12 - Agency Scoping Meeting - comments

Matt,

Here are comments from EPAJ on scoping package for NE 2004-10258; Niobrara East & West-Highway 12:

There is the potential for the proposed project to impact waters of the United States, Section 404 of the Clean Water Act (CWA) (33 USC 1344). There are a multitude of wetland and riverine resources in the Missouri River and Ponca Creek areas. The wetlands provide several functions such as filtration, flood control, and critical habitat for federally threatened and endangered species in this area. Additionally, the area near the proposed project site is included in the Wild and Scenic Rivers System pursuant to the Wild and Scenic Rivers Act (16 U.S.C. Section 1271 et seq). The proposed project would directly impact 68 acres of seven types of wetlands [seasonally flooded, palustrine emergent and forested wetlands (PEM/FOC), semi-permanently flooded, palustrine emergent wetlands (PEMF), seasonally flooded, palustrine emergent and forested wetlands (PFO/EMC), seasonally flooded, palustrine scrub-shrub wetlands (PSSC), seasonally flooded, palustrine emergent wetlands (PEMC), temporarily flooded and saturated, palustrine emergent wetlands (PEM/ABF), and temporarily flooded, palustrine emergent wetlands (PEMA)], and relocate/channelize 1,300 linear feet of stream. If permitted, this project would create the largest impact on wetlands and streams that has ever occurred in the state of Nebraska. As a result, significant environmental impacts would occur.

The Environmental Protection Agency (EPA) has concerns regarding this proposed project and intends to provide substantive comments when the public notice is announced. The EPA has several concerns: (1) the availability of practicable alternatives, (2) the direct loss of 68 acres of wetland habitat, and impacts to 1,300 linear feet of stream within EPA Region 7's Aquatic and Terrestrial Focus Areas, and (3) the cumulative impacts of wetland and stream loss within an environmentally sensitive area.

According to the scoping meeting notes, the following two additional alternatives were suggested:

a "bridge or causeway for the portions of the road in wetlands or susceptible to flooding"

sedimentation research and potential removal EPA recommends that these be considered to their fullest in the initial range of alternatives in the EIS.

If you have any questions about the comments above, please contact Jennifer Ousley (913) 551-7498 or Dr. Eliodora Chamberlain (913) 551 7945.

Hughes, Ruth Ellen

From: Chamberlain.Eliodora@epamail.epa.gov
Sent: Wednesday, September 24, 2008 11:23 AM
To: Pillard, Matt; matt.t.wray@usace.army.mil
Cc: Ousley.Jennifer@epamail.epa.gov; Horchem.Brad@epamail.epa.gov
Subject: Fw: N-12 - Agency Scoping Meeting - comments revised

Revised



Eliodora Chamberlain, PhD
Biologist
US EPA Region 7
WWPD/WPIB
901 N. 5th St., Kansas City, KS 66101
Office: 913-551-7945 FAX: 913-551-9945
Email: chamberlain.eliodora@epa.gov

----- Forwarded by Eliodora Chamberlain/R7/USEPA/US on 09/24/2008 11:22 AM -----

Jennifer Ousley/R7/USEPA/US

To "Pillard, Matt" <Matt.Pillard@hdrinc.com>

cc Joe Cothorn/R7/USEPA/US@EPA, Eliodora Chamberlain/R7/USEPA/US@EPA, Brad Horchem/R7/USEPA/US@EPA

09/24/2008 09:03 AM

Subject N-12 - Agency Scoping Meeting - comments revised

Matt,

Here are comments from EPA on scoping package for NE 2004-10258; Niobrara East & West-Highway 12:

- There is the potential for the proposed project to impact waters of the United States, Section 404 of the Clean Water Act (CWA) (33 USC 1344). There are a multitude of wetland and riverine resources in the Missouri River and Ponca Creek areas. The wetlands provide several functions such as filtration, flood control, and critical habitat for federally threatened and endangered species in this area. Additionally, the area near the proposed project site is included in the Wild and Scenic Rivers System pursuant to the Wild and Scenic Rivers Act (16 U.S.C. Section 1271 *et seq*). The proposed project would directly impact 68 acres of seven types of wetlands [seasonally flooded, palustrine emergent and forested wetlands (PEM/FOC), semi-permanently flooded, palustrine emergent wetlands (PEMF), seasonally flooded, palustrine emergent and forested wetlands (PFO/EMC), seasonally flooded, palustrine scrub-shrub wetlands (PSSC), seasonally flooded, palustrine emergent wetlands (PEMC), temporarily flooded and saturated, palustrine emergent wetlands (PEM/ABF), and temporarily flooded, palustrine emergent wetlands (PEMA)], and relocate/channelize 1,300 linear feet of stream. As a result, significant environmental impacts would occur.
- The EPA has several concerns: (1) the availability of practicable alternatives, (2) the direct loss of 68 acres of wetland habitat, and impacts to 1,300 linear feet of stream within EPA Region 7's Aquatic and Terrestrial Focus Areas, and (3) the cumulative impacts of wetland and stream loss within an environmentally sensitive area.
- According to the scoping meeting notes, the following two additional alternatives were suggested:
 1. a "bridge or causeway for the portions of the road in wetlands or susceptible to flooding"
 2. sedimentation research and potential removal

EPA recommends that these be considered to their fullest in the initial range of alternatives in the EIS.

If you have any questions about the comments above, please contact Jennifer Ousley (913) 551-7498 or Dr. Eliodora Chamberlain (913) 551 7945.



NEBRASKA STATE HISTORICAL SOCIETY

1500 R STREET, P.O. BOX 82554, LINCOLN, NE 68501-2554
(402) 471-3270 Fax: (402) 471-3100 1-800-833-6747 www.nebraskahistory.org

Michael J. Smith, Director/CEO

November 20, 2008

Mr. Leonard J. Sand
Highway Environmental Program Manager
Planning and Project Development Division
Nebraska Department of Roads
1500 Highway 2, PO Box 94759
Lincoln, NE 68509-4759

RE: Niobrara East and West Project # S-12-5(1011) CN# 31674 County: Knox
HP #0811-070-01 – **Standing Structures Only**

Dear Mr. Sand:

Melissa Dirr recently submitted information regarding the above referenced project on your behalf for our review and comment. Our comment on this project and its potential to affect historic properties is required by Section 106 of the National Historic Preservation Act of 1966, as amended, and implementing regulations 36 CFR Part 800.

We concur with the eligibility recommendations made by Dirr (November 10, 2008). In our opinion, the rural church located within the APE (NeHBS# KX00-212) is eligible for listing in the National Register of Historic Places. In addition, we agree that the commercial buildings located in Verdel (NeHBS# KX13-2, KX13-3, KX13-4, and KX13-24) are eligible for listing in the National Register of Historic Places. We do recognize, however, that the eligible properties in Verdel are outside the APE as currently defined. Ms. Dirr's diligence in identifying these properties is commendable and should the APE be altered to include the community of Verdel, we will be able to move quickly toward assessing project effects.

The cover letter submitted with this report requests that we concur with a "no historic properties affected" determination. However, it is our understanding that project planning has not proceeded far enough to determine project effect for the eligible property located within the APE. We are unable to concur with that finding pending additional information. We look forward to reviewing the assessment for effects when additional information becomes available. We do agree with Ms. Dirr that the eligible properties located outside the APE in nearby Verdel will not be affected by the project as proposed.

When available, please submit assessment of effects information to: Bob Puschendorf, Nebraska State Historic Preservation Office, P.O. Box 82554, 1500 R Street, Lincoln, NE 68501-2554. If you have any questions, please don't hesitate to contact Stacy Stupka-Burda, 402-471-4770.

Sincerely,

L. Bob Puschendorf
Deputy SHPO
Nebraska State Historical Society
PO Box 82554
Lincoln, NE 68501-2554



LOWER NIOBRARA
NATURAL RESOURCES DISTRICT

410 Walnut Street • P.O. Box 350
Butte, NE 68722-0350

Phone: (402) 775-2343
Fax: (402) 775-2334

November 30, 2007

Kevin Barta
Knox County Highway Superintendent
P.O. Box 85
Center NE 68724-0085

Dear Kevin:

The Lower Niobrara Natural Resources District hereby supports the Knox County Board of Supervisors in their efforts that Hwy 12 west of Niobrara not be relocated, but raised as needed.

The project changes would place the new proposed road in an area that would be impossible to maintain a road and also would disturb protected wetlands. We feel that Resolution #2007-25 submitted by the Knox County Board of Supervisors is the proper solution to this issue.

Sincerely,

A handwritten signature in cursive script that reads "Duane F. Filsinger".

Duane F. Filsinger
General Manager

DF/vf

From: Wayne.Werkmeister@nps.gov
To: Matt.T.Wray@usace.army.mil; [Pillard, Matt](#)
Subject: Fw: 6(f) Question
Date: Wednesday, December 17, 2008 11:04:02 AM
Attachments: [31-00931 Niobrara SP map.pdf](#)
[31-00645 City Map.pdf](#)

Just FYI, more to follow.

Missouri National Recreational River
Chief of Resources Management
PO Box 591
O'Neill, NE 68763
Office (402) 336-3970
Mobile (402) 394-7351
FAX 336-3981

----- Forwarded by Wayne Werkmeister/MNRRR/NPS on 12/17/2008 11:02 AM -----

Michael Madell

12/17/2008 10:02 AM EST
To:
cc: "Wayne Werkmeister" <wayne_werkmeister@nps.gov>
Subject: Fw: 6(f) Question

Fyi. Apparently we do have the possibility of 6(f) issues on Hwy 12. Please forward to others who need to know this info. Call if you have questions.

----- Original Message -----

From: Andrea Messam
Sent: 12/15/2008 05:26 PM CST
To: Michael Madell
Cc: Bob Anderson; Andrea Messam
Subject: Fw: 6(f) Question

Superintendent Madell,

Bob Anderson, Recreation Grants Chief, MWRO, asked me to provide you with some information in relation to your inquiry.

We first learned of the road project through the Environmental Review, ER 08/0785, Nebraska Highway 12 Niobrara East and West Project (Nebraska Department of Roads), Notice of Intent in August.

Initially, we had no comments. However, this is an update to you, since our initial review. Two Land & Water Conservation Fund (L&WCF) assisted sites are within close proximity to Highway 12's project area of potential effect, as you described.

The following projects were sponsored by the Nebraska Game and Parks Commission, NGPC:

- 31-00624 Niobrara Acquisition
- 31-00725 Niobrara State Park Replacement
- 31-00813 Swimming Pool Development - Niobrara State Park
- 31-00931 Picnic Facilities - Statewide [includes Niobrara State Park]

The following project was sponsored by the Village of Niobrara:
31-00645 Sports & Playfield - Niobrara [This is city park located east of the Niobrara Rive, north of Walnut and west of 7th Street, more or less]

We normally consult with our Nebraska state L&WCF contact, Mr. Timothy Montgomery, NGPC at 402-471-5424. Timothy is aware that you may contact him or visa versa through his contacts for further consultation.

Since your office is in South Dakota, let me give you the South Dakota L&WCF contact, Mr. Randy Kittle 605-773-5490.

Attached are maps of the L&WCF sites for your reference:

Note: if this map is showing upside down, use the rotate clockwise arrow toolbar to reverse it] [the access roads to the city park connects to Highway 12, because the park is surrounded by farmland. The area shaded in red is the L&WCF site, blue is school property, green is a leased property].

Hope this is helpful for starters. Please contact if you need additional information.

Andrea Messam
Outdoor Recreation Planner
402-661-1564 voice
402-661-1565 fax
Andrea_Messam@nps.gov e-mail

----- Forwarded by Andrea Messam/Omaha/NPS on 12/15/2008 04:14 PM -----

Bob L Anderson

12/15/2008 01:21 PM CST

To: Andrea Messam/Omaha/NPS@NPS
cc: Michael Madell/MNRR/NPS@NPS
Subject: Fw: 6(f) Question

Andrea,

I believe you are already familiar with the highway improvement project Mike references in his message below. Would you please advise Mike whether or not any L&WCF assisted parklands might be in the immediate study area? If uncertain, please give Tim Montgomery in Lincoln a call as he also will be involved in this. Thanks,

Bob

----- Forwarded by Bob L Anderson/Omaha/NPS on 12/15/2008 01:17 PM -----

Michael Madell/MNRR/NPS

12/12/2008 02:41 PM CST

To Bob L Anderson/Omaha/NPS@NPS
cc
Subject 6(f) Question

Greetings!

This is one of those questions that I am embarrassed to say I may or may not have already asked. However, as I am not certain, I figured I better ask it again.

The NPS is engaged as a cooperating agency on an EIS involving relocation of Nebraska Highway 12 in Knox County. The west end of the project begins about one mile east of Verdel; the east end of the project a point one mile east of route S-54D east of Niobrara, NE.

Of course the question is if we have any lands encumbered under Section 6(f) within that study area. Most of the study area is rural ag land. The only possibilities that I see are Niobrara State Park (where one alternate alignment grazes the SW corner of the park) or the Town of Niobrara. Can you ask one of your staff to do a quick check for any lands that we might want to be aware of?

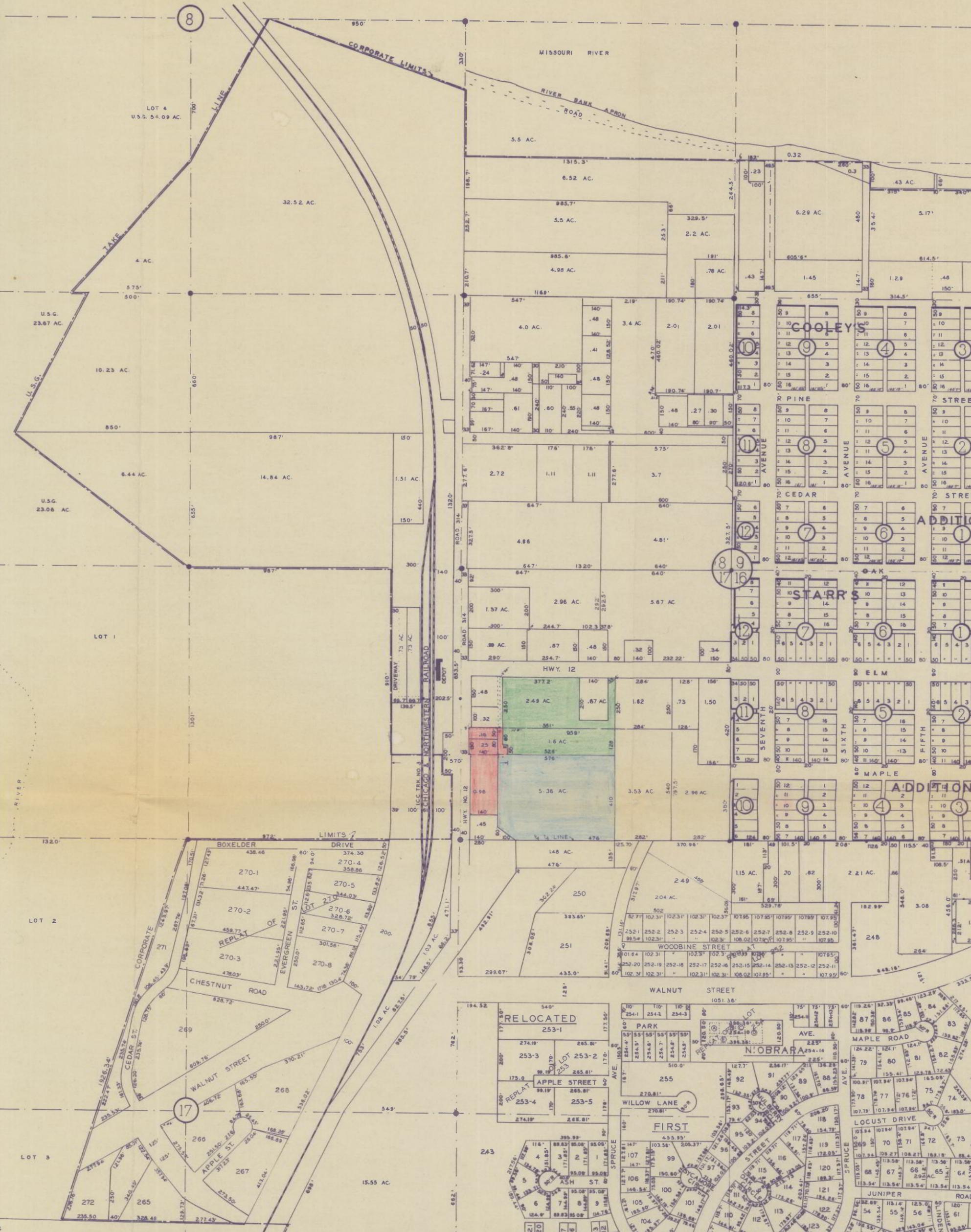
Note that because of reasons too detailed to go into here that the lead agency for this project is the Corps of Engineers and NOT Federal Highways.

Thanks, Bob!

MM

Michael Madell
Superintendent
Missouri National Recreational River
P.O. Box 666
Yankton, South Dakota 57078
Ph. 605-214-3389
Fx. 402-667-2552

NIOBRARA NEBRASKA



of Project Boundary
to known outstanding
rights
project # 31-00931
C. Metzger
Sept. 17, 2008

LEGEND:

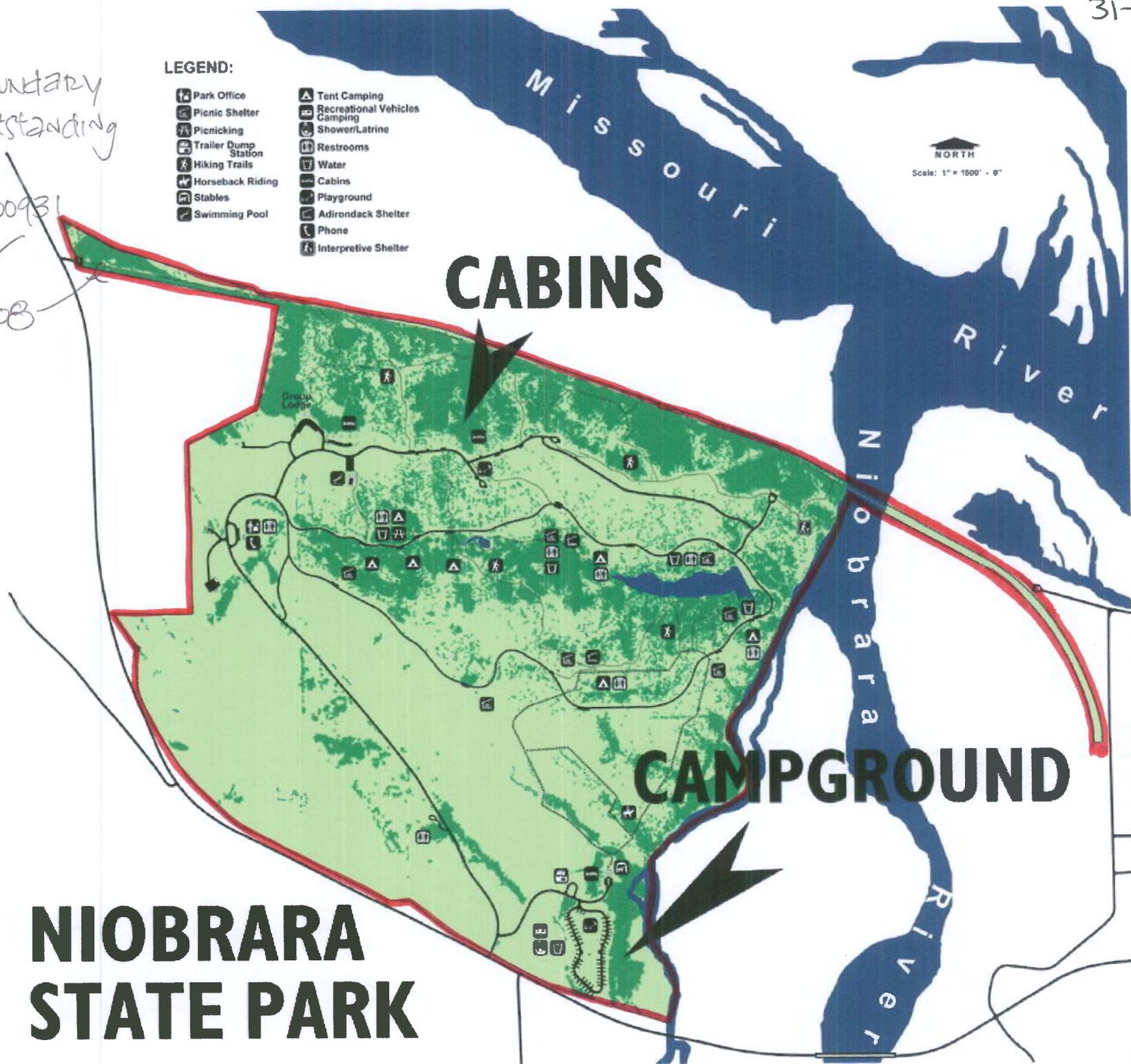
- | | |
|----------------------|-----------------------|
| Park Office | Tent Camping |
| Picnic Shelter | Recreational Vehicles |
| Picnicking | Camping |
| Trailer Dump Station | Shower/Latrine |
| Hiking Trails | Restrooms |
| Horseback Riding | Water |
| Stables | Cabins |
| Swimming Pool | Playground |
| | Adirondack Shelter |
| | Phone |
| | Interpretive Shelter |

NORTH
Scale: 1" = 1600' - 0"

CABINS

CAMPGROUND

**NIOBRARA
STATE PARK**



6

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From: Chamberlain.Eliodora@epamail.epa.gov
To: [Pillard, Matt](#)
Cc: Brooke_Stansberry@fws.gov; [Gorton, Dick](#); Ousley_Jennifer@epamail.epa.gov; [Leonard Sand](#); [Matt.T.Wray@usace.army.mil](mailto:(Matt.T.Wray@usace.army.mil)); [Hall, Meagan](#); Michael_Madell@nps.gov; [Porter, Sara](#); Smith.StephenK@epamail.epa.gov; wayne_werkmeister@nps.gov
Subject: Culvert Criteria Information and References
Date: Monday, January 12, 2009 1:26:44 PM
Attachments: [ATT00001.gif](#)
[Attachment 2-Culvert Criteria.doc](#)



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Attachment 2 Culvert Recommendations

If culvert crossing structures must be utilized, we recommend utilizing several best management practices for fish passage, stream continuity, and some wildlife passage. Planning and managing culvert placement that is both beneficial for the Nebraska Department and protects Nebraska's natural resources. EPA recommends the following 11 Best Management Practices for culvert planning and management.

- 1) Conduct a cross sectional analysis to determine optimal design and placement of culverts. Inadequate drainage, poor location, improperly sized and maintained culverts, and lack of erosion control measures on road prisms, cut-and-fill slopes, and ditches are problems common to a poor road design¹.
- 2) Install culverts which are long enough to extend beyond the toe of the fill slopes^{2,3}.
- 3) Carefully evaluate the slopes, depths and relative positions of the flow profile for various flow ranges. Keep approaches to stream crossings to as gentle a slope as practical⁴.
- 4) Place the culvert on the grade of the existing stream channel. Grade Control Measures: place rock, wood, earth, and other appropriate material structures across the channel and anchored in the stream banks to provide a "hard point" in the streambed that resists the erosion forces of the degradational zone, and/or to reduce the upstream energy slope to prevent the bed scour^{2,3,4}.
- 5) Culvert is designed to provide water depths and velocities at low flow that are comparable to those found in upstream and downstream natural stream segments. In order to provide water depth and velocities at low flow it is usually necessary to construct a low flow channel within the structure. Otherwise, the width of the structure needed to accommodate higher flows will create conditions that are too shallow at low flow. When constructing the channel special attention should be paid to the sizing and arrangement of materials within the structure. If only large material is used, without smaller material filling the voids, there is a risk that flows could go subsurface within the structure^{2,3}.
- 6) Align culverts horizontally and longitudinally with the stream channel, and minimize changes in the stream channel cross section at inlet basins to prevent debris plugs^{2,3}.
- 7) Openness ratio of the culvert should be ≥ 0.25 ^{2,3}.
- 8) The culvert should be embedded ≥ 1 foot for box culverts and pipe arches, and at least 25% for pipe culverts. In some cases, site constraints may limit the degree to which a culvert can be embedded. In these cases, pipe culverts should not be used and box culverts, pipe arches, open-bottom arches, or bridges should be considered^{2,3}.
- 9) Use a natural bottom substrate within the culvert (matching upstream and downstream substrate). Careful attention must be paid to the composition of the substrate within the culvert. The substrate within the structure should match the composition of the substrate in the natural stream at the time of construction and over time as the structure has had the opportunity to pass significant flood events. This substrate should either resist displacement during flood events or the structure should be designed to maintain an appropriate bottom through natural bed load transport^{2,3}.
- 10) A 30% vent area ratio (VAR) at bank full conditions. VAR is important in evaluating

the opening in the structure. For example, if there is 100 sq. ft. opening in a channel from top of bank to top of bank then the opening in the stream crossing should be at least 30 sq. ft.^{2,3}.

- 11) Design should address regular maintenance activities including road grading, ditch cleaning, culvert cleaning, erosion control vegetation establishment, and vegetation management⁴.

References Cited:

¹ Stoner, R and T. McFall. 1991. Woods Roads: A Guide to Planning and Constructing a Forest Roads System. U.S. Department of Agriculture, Soil Conservation Service, South National Technical Center, Fort Worth, Texas.

² River and Stream Continuity Partnership. 2004. Massachusetts River and Stream Crossing Standards: Technical Guidelines. University of Massachusetts, Amherst, The Nature Conservancy, Massachusetts Department of Fish and Game.

³ USDA Forest Service. 2005. Aquatic Organism Passage: Inventory and Assessment at Road-Stream Crossings. Powder Valley Nature Center, Missouri Department of Conservation.

⁴ Federal Interagency Stream Restoration Working Group (FISRWG). 2001. Stream corridor restoration: principles, processes, and practices. GPO Item No. 0120-A; SuDocs No. A57.6/2:EN3PT.653. ISBN-0-934213-59-3.

From: [Pillard, Matt](#)
To: [Hall, Meagan](#); [Marinovich, Melissa](#)
Subject: FW: N-12 - Species List
Date: Wednesday, February 04, 2009 9:54:28 AM
Attachments: [ATT00001.jpg](#)
[ReptileListX23.doc](#)
[AmphibianListX10.doc](#)
[FishListX98.doc](#)
[MammalListX63.doc](#)
[MusselListX18.doc](#)

[here we go.](#)

From: Wayne_Werkmeister@nps.gov [mailto:Wayne_Werkmeister@nps.gov]
Sent: Wednesday, February 04, 2009 9:23 AM
To: Pillard, Matt
Cc: Brooke_Stansberry@fws.gov; Matt.T.Wray@usace.army.mil; michael_madell@nps.gov; Stephen_K_Wilson@nps.gov
Subject: Re: N-12 - Species List

How about these?

Missouri National Recreational River
Chief of Resources Management
PO Box 591
O'Neill, NE 68763
Office (402) 336-3970
Mobile (402) 394-7351
FAX 336-3981

"Pillard, Matt"
<Matt.Pillard@hdrinc.com>
02/04/2009 08:18 AM CST
To: "wayne_werkmeister@nps.gov" <wayne_werkmeister@nps.gov>,
"Brooke_Stansberry@fws.gov" <Brooke_Stansberry@fws.gov>
cc: "Wray, Matt, T NWO" <Matt.T.Wray@usace.army.mil>
Subject: N-12 - Species List

Brooke and Wayne,

On our January 12 conference call with you, EPA, NDOR, and HDR, we discussed the design parameters for the bridge options for the floodplain alternative of the N-12 Project. USFWS and NPS stated that they would collectively provide a list of those aquatic species in the N-12 Study Area that the bridges and/or culverts should be designed to accommodate. As we are continuing to move forward on the bridge option design, we would like you to send that information at your earliest convenience.

Thanks.

Matt Pillard, AICP

Senior Environmental Planner

8404 Indian Hills Drive | Omaha, NE | 68114-4098
Phone: 402.399.1186 | Cell: 402.689.5187 | Fax: 402.399.1111
Email: Matt.Pillard@hdrinc.com



Amphibians of the MNRR

<u>TSN</u>	<u>Order</u>	<u>Family</u>	<u>Scientific Name</u>	<u>Common Names</u>
173484	Anura	Bufo	Bufo cognatus	Great Plains Toad
173476	Anura	Bufo	Bufo woodhousii	Woodhouse's Toad
173520	Anura	Hylidae	Acris crepitans	Northern Cricket Frog
173502	Anura	Hylidae	Hyla chrysoscelis	Cope's Gray Treefrog
173525	Anura	Hylidae	Pseudacris triseriata	Striped Chorus Frog, Western Chorus Frog
173448	Anura	Ranidae	Rana blairi	Plains Leopard Frog
173441	Anura	Ranidae	Rana catesbeiana	American Bullfrog, Bullfrog
173443	Anura	Ranidae	Rana pipiens	Northern Leopard Frog
206989	Anura	Scaphiopodidae	Spea bombifrons	Plains Spadefoot
173592	Caudata	Ambystomatidae	Ambystoma tigrinum	Tiger Salamander

Fish of the MNRR

<u>TSN</u>	<u>Order</u>	<u>Family</u>	<u>Scientific Name</u>	<u>Common Names</u>
161071	Acipenseriformes	Acipenseridae	Acipenser fulvescens	lake sturgeon
161081	Acipenseriformes	Acipenseridae	Scaphirhynchus albus	pallid sturgeon
161082	Acipenseriformes	Acipenseridae	Scaphirhynchus platyrhynchus	shovelnose sturgeon
161088	Acipenseriformes	Polyodontidae	Polyodon spathula	American paddlefish, paddlefish
161127	Anguilliformes	Anguillidae	Anguilla rostrata	American eel
163261	Characiformes	Characidae	Serrasalmus	
161707	Clupeiformes	Clupeidae	Alosa chrysochloris	blue herring, golden shad, green herring, river herring, skipjack, skipjack herring, skipjack shad
161706	Clupeiformes	Clupeidae	Alosa pseudoharengus	alewife, bigeye herring, branch herring, freshwater herring, gray herring, grayback, kyak, sawbelly, white herring
161737	Clupeiformes	Clupeidae	Dorosoma cepedianum	American gizzard shad, eastern gizzard shad, gizzard shad, hickory shad, mud shad, skipjack
163919	Cypriniformes	Catostomidae	Carpiodes carpio	river carpsucker
163917	Cypriniformes	Catostomidae	Carpiodes cyprinus	quillback, quillback carpsucker
163920	Cypriniformes	Catostomidae	Carpiodes velifer	highfin carpsucker
553273	Cypriniformes	Catostomidae	Catostomus commersonii	white sucker
163953	Cypriniformes	Catostomidae	Cycleptus elongatus	blue sucker
163955	Cypriniformes	Catostomidae	Ictiobus bubalus	smallmouth buffalo
163956	Cypriniformes	Catostomidae	Ictiobus cyprinellus	bigmouth buffalo
163957	Cypriniformes	Catostomidae	Ictiobus niger	black buffalo
163939	Cypriniformes	Catostomidae	Moxostoma erythrurum	golden redhorse
163928	Cypriniformes	Catostomidae	Moxostoma macrolepidotum	shorthead redhorse
163508	Cypriniformes	Cyprinidae	Campostoma anomalum	central stoneroller
163350	Cypriniformes	Cyprinidae	Carassius auratus	goldfish
163537	Cypriniformes	Cyprinidae	Ctenopharyngodon idella	grass carp, silver orfe
163792	Cypriniformes	Cyprinidae	Cyprinella lutrensis	red shiner
163803	Cypriniformes	Cyprinidae	Cyprinella spiloptera	spotfin shiner
163344	Cypriniformes	Cyprinidae	Cyprinus carpio	European carp, common carp
163362	Cypriniformes	Cyprinidae	Hybognathus argyritis	western silvery minnow
163363	Cypriniformes	Cyprinidae	Hybognathus hankinsoni	brassy minnow

163360	Cypriniformes	Cyprinidae	Hybognathus nuchalis	Mississippi silvery minnow
163361	Cypriniformes	Cyprinidae	Hybognathus placitus	plains minnow
163691	Cypriniformes	Cyprinidae	Hypophthalmichthys molitrix	silver carp
163692	Cypriniformes	Cyprinidae	Hypophthalmichthys nobilis	bighead carp
163836	Cypriniformes	Cyprinidae	Luxilus cornutus	common shiner
163864	Cypriniformes	Cyprinidae	Macrhybopsis aestivalis	speckled chub
163866	Cypriniformes	Cyprinidae	Macrhybopsis gelida	sturgeon chub
163868	Cypriniformes	Cyprinidae	Macrhybopsis meeki	sicklefin chub
163870	Cypriniformes	Cyprinidae	Macrhybopsis storeriana	silver chub
163368	Cypriniformes	Cyprinidae	Notemigonus crysoleucas	golden shiner
163412	Cypriniformes	Cyprinidae	Notropis atherinoides	emerald shiner
163429	Cypriniformes	Cyprinidae	Notropis blennioides	river shiner
163414	Cypriniformes	Cyprinidae	Notropis burchanani	ghost shiner
163439	Cypriniformes	Cyprinidae	Notropis dorsalis	bigmouth shiner
163404	Cypriniformes	Cyprinidae	Notropis hudsonius	spottail shiner
163417	Cypriniformes	Cyprinidae	Notropis shumardi	silverband shiner
163419	Cypriniformes	Cyprinidae	Notropis stramineus	sand shiner
163471	Cypriniformes	Cyprinidae	Notropis topeka	Topeka shiner
163421	Cypriniformes	Cyprinidae	Notropis volucellus	mimic shiner
163502	Cypriniformes	Cyprinidae	Phenacobius mirabilis	suckermouth minnow
163592	Cypriniformes	Cyprinidae	Phoxinus eos	northern redbelly dace
163516	Cypriniformes	Cyprinidae	Pimephales notatus	bluntnose minnow
163517	Cypriniformes	Cyprinidae	Pimephales promelas	fathead minnow
163882	Cypriniformes	Cyprinidae	Platygobio gracilis	flathead chub
163382	Cypriniformes	Cyprinidae	Rhinichthys atratulus	blacknose dace, eastern blacknose dace
163384	Cypriniformes	Cyprinidae	Rhinichthys cataractae	longnose dace
163376	Cypriniformes	Cyprinidae	Semotilus atromaculatus	creek chub
165666	Cyprinodontiformes	Fundulidae	Fundulus sciadicus	plains topminnow
162140	Esociformes	Esocidae	Esox americanus	grass pickerel, redbfin or grass pickerel, redbfin pickerel
162142	Esociformes	Esocidae	Esox americanus vermiculatus	grass pickerel
162139	Esociformes	Esocidae	Esox lucius	northern pike
162144	Esociformes	Esocidae	Esox masquinongy	muskellunge
164725	Gadiformes	Gadidae	Lota lota	burbot, eelpout
166399	Gasterosteiformes	Gasterosteidae	Culaea inconstans	brook stickleback

162041	Osmeriformes	Osmeridae	Osmerus mordax	rainbow smelt
161905	Osteoglossiformes	Hiodontidae	Hiodon alosoides	goldeye
168097	Perciformes	Centrarchidae	Ambloplites rupestris	rock bass
168175	Perciformes	Centrarchidae	Archoplites interruptus	Sacramento perch
168132	Perciformes	Centrarchidae	Lepomis cyanellus	green sunfish
168144	Perciformes	Centrarchidae	Lepomis gibbosus	kiver, pumpkinseed
168151	Perciformes	Centrarchidae	Lepomis humilis	orangespotted sunfish
168141	Perciformes	Centrarchidae	Lepomis macrochirus	bluegill
168154	Perciformes	Centrarchidae	Lepomis microlophus	redecor sunfish
550562	Perciformes	Centrarchidae	Micropterus dolomieu	smallmouth bass
168161	Perciformes	Centrarchidae	Micropterus punctulatus	spotted bass
168160	Perciformes	Centrarchidae	Micropterus salmoides	largemouth bass
168166	Perciformes	Centrarchidae	Pomoxis annularis	white crappie
168167	Perciformes	Centrarchidae	Pomoxis nigromaculatus	black crappie
167678	Perciformes	Moronidae	Morone americana	white perch
167682	Perciformes	Moronidae	Morone chrysops	white bass
168393	Perciformes	Percidae	Etheostoma exile	Iowa darter
168369	Perciformes	Percidae	Etheostoma nigrum	johnny darter
168469	Perciformes	Percidae	Perca flavescens	yellow perch
650171	Perciformes	Percidae	Sander canadensis	sauger
650173	Perciformes	Percidae	Sander vitreus	walleye
168509	Perciformes	Percidae	Stizostedion canadense	
168506	Perciformes	Percidae	Stizostedion vitreum	walleye
169364	Perciformes	Sciaenidae	Aplodinotus grunniens	freshwater drum
159730	Petromyzontiformes	Petromyzontidae	Ichthyomyzon unicuspis	silver lamprey
161989	Salmoniformes	Salmonidae	Oncorhynchus mykiss	rainbow trout, redband trout, steelhead
161997	Salmoniformes	Salmonidae	Salmo trutta	brown trout
161095	Semionotiformes	Lepisosteidae	Lepisosteus oculatus	shortnose gar, spotted gar
161094	Semionotiformes	Lepisosteidae	Lepisosteus osseus	longnose gar
161096	Semionotiformes	Lepisosteidae	Lepisosteus platostomus	shortnose gar
164039	Siluriformes	Ictaluridae	Ameiurus melas	black bullhead
164041	Siluriformes	Ictaluridae	Ameiurus natalis	yellow bullhead
163997	Siluriformes	Ictaluridae	Ictalurus furcatus	blue catfish
163998	Siluriformes	Ictaluridae	Ictalurus punctatus	channel catfish, graceful catfish
164013	Siluriformes	Ictaluridae	Noturus flavus	stonecat
164003	Siluriformes	Ictaluridae	Noturus gyrinus	tadpole madtom

164029	Siluriformes	Ictaluridae	Pylodictis olivaris	flathead catfish
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<u>Mammals of the MNRR</u>				
<u>TSN</u>	<u>Order</u>	<u>Family</u>	<u>Scientific Name</u>	<u>Common Names</u>
180698	Artiodactyla	Cervidae	Odocoileus hemionus	mule deer
180699	Artiodactyla	Cervidae	Odocoileus virginianus	white-tailed deer
180599	Carnivora	Canidae	Canis latrans	coyote
180609	Carnivora	Canidae	Urocyon cinereoargenteus	common gray fox, gray fox
180604	Carnivora	Canidae	Vulpes vulpes	red fox
180582	Carnivora	Felidae	Lynx rufus	bobcat
552479	Carnivora	Felidae	Puma concolor	mountain lion, puma
180562	Carnivora	Mephitidae	Mephitis mephitis	striped skunk
180549	Carnivora	Mustelidae	Lontra canadensis	northern river otter, river otter
180556	Carnivora	Mustelidae	Mustela frenata	long-tailed weasel
180554	Carnivora	Mustelidae	Mustela nivalis	least weasel
180553	Carnivora	Mustelidae	Mustela vison	American mink, mink
180565	Carnivora	Mustelidae	Taxidea taxus	American badger, badger
180575	Carnivora	Procyonidae	Procyon lotor	common raccoon, northern raccoon, raccoon
180008	Chiroptera	Vespertilionidae	Eptesicus fuscus	big brown bat
180014	Chiroptera	Vespertilionidae	Lasionycteris noctivagans	silver-haired bat
180016	Chiroptera	Vespertilionidae	Lasiurus borealis	eastern red bat, red bat
180017	Chiroptera	Vespertilionidae	Lasiurus cinereus	hoary bat
179988	Chiroptera	Vespertilionidae	Myotis lucifugus	little brown bat, little brown myotis
180000	Chiroptera	Vespertilionidae	Myotis septentrionalis	northern long-eared bat, northern myotis
180022	Chiroptera	Vespertilionidae	Nycticeius humeralis	evening bat
180025	Chiroptera	Vespertilionidae	Pipistrellus subflavus	eastern pipistrelle
179921	Didelphimorphia	Didelphidae	Didelphis virginiana	Virginia opossum
179967	Insectivora	Soricidae	Blarina brevicauda	mole shrew, northern short-tailed shrew, short-tailed shrew
-9749100	Insectivora	Soricidae	Blarina	

			brevicauda brevicauda	
179929	Insectivora	Soricidae	Sorex cinereus	cinereus shrew, common shrew, masked shrew
179946	Insectivora	Soricidae	Sorex hoyi	pygmy shrew
179979	Insectivora	Talpidae	Scalopus aquaticus	eastern mole, topos
180115	Lagomorpha	Leporidae	Lepus californicus	black-tailed jack rabbit, black-tailed jackrabbit
180124	Lagomorpha	Leporidae	Sylvilagus floridanus	eastern cottontail
180212	Rodentia	Castoridae	Castor canadensis	american beaver, beaver
-9749104	Rodentia	Castoridae	Castor canadensis missouriensis	
180386	Rodentia	Dipodidae	Zapus hudsonius	meadow jumping mouse
180393	Rodentia	Erethizontidae	Erethizon dorsatum	common porcupine, porcupine
180216	Rodentia	Geomyidae	Geomys bursarius	plains pocket gopher
552483	Rodentia	Heteromyidae	Chaetodipus hispidus	hispid pocket mouse
180244	Rodentia	Heteromyidae	Dipodomys ordii	Ord's kangaroo rat
180261	Rodentia	Heteromyidae	Perognathus flavescens	plains pocket mouse
180312	Rodentia	Muridae	Microtus ochrogaster	prairie vole
-9749102	Rodentia	Muridae	Microtus ochrogaster haydenii	
180297	Rodentia	Muridae	Microtus pennsylvanicus	meadow vole
180366	Rodentia	Muridae	Mus musculus	house mouse
180318	Rodentia	Muridae	Ondatra zibethicus	muskbeaver, muskrat
180278	Rodentia	Muridae	Peromyscus leucopus	white-footed mouse
-9749105	Rodentia	Muridae	Peromyscus leucopus aridulus	
180276	Rodentia	Muridae	Peromyscus maniculatus	deer mouse
-9749101	Rodentia	Muridae	Peromyscus maniculatus luteus	
-9746667	Rodentia	Muridae	Peromyscus maniculatus luteus	

180363	Rodentia	Muridae	Rattus norvegicus	Norway rat
180343	Rodentia	Muridae	Reithrodontomys megalotis	western harvest mouse
-9749103	Rodentia	Muridae	Reithrodontomys megalotis dychei	
180137	Rodentia	Sciuridae	Marmota monax	woodchuck
180172	Rodentia	Sciuridae	Sciurus niger	eastern fox squirrel, fox squirrel
-501798	Rodentia	Sciuridae	Sciurus niger rufiventer	western fox squirrel
180153	Rodentia	Sciuridae	Spermophilus franklinii	Franklin's ground squirrel
180162	Rodentia	Sciuridae	Spermophilus tridecemlineatus	thirteen-lined ground squirrel

<u>Mussels of the MNRR</u>				
<u>TSN</u>	<u>Order</u>	<u>Family</u>	<u>Scientific Name</u>	<u>Common Names</u>
-9724542	_Unassigned Animalia	_Unassigned Animalia	Pyganodon grandis corpulenta	
80035	Unionoida	Unionidae	Amblema plicata	threeridge
79945	Unionoida	Unionidae	Anodonta suborbiculata	flat floater
80239	Unionoida	Unionidae	Arcidens confragosus	rock pocketbook
80028	Unionoida	Unionidae	Lampsilis siliquoidea	fatmucket
80006	Unionoida	Unionidae	Lampsilis teres	yellow sandshell
80135	Unionoida	Unionidae	Lasmigona complanata	white heelsplitter
80182	Unionoida	Unionidae	Leptodea fragilis	fragile papershell
80185	Unionoida	Unionidae	Leptodea leptodon	scaleshell
80282	Unionoida	Unionidae	Potamilus alatus	pink heelsplitter
80288	Unionoida	Unionidae	Potamilus ohioensis	pink papershell
568179	Unionoida	Unionidae	Pyganodon grandis	giant floater
80060	Unionoida	Unionidae	Quadrula quadrula	mapleleaf
80151	Unionoida	Unionidae	Strophitus undulatus	creeper, squawfoot
80364	Unionoida	Unionidae	Toxolasma parvus	lilliput
80166	Unionoida	Unionidae	Truncilla donaciformis	fawnsfoot
80167	Unionoida	Unionidae	Truncilla truncata	deertoe

<u>Reptiles of the MNRR</u>				
<u>TSN</u>	<u>Order</u>	<u>Family</u>	<u>Scientific Name</u>	<u>Common Names</u>
174169	Squamata	Colubridae	Coluber constrictor	Racer, eastern racer
174158	Squamata	Colubridae	Diadophis punctatus	Ring-necked Snake, Ringneck Snake
174183	Squamata	Colubridae	Elaphe vulpina	Fox Snake, Foxsnake, western fox snake
174155	Squamata	Colubridae	Heterodon nasicus	Western Hog-nosed Snake, western hognose snake
563935	Squamata	Colubridae	Heterodon platirhinos	Eastern Hog-nosed Snake, eastern hognose snake
174154	Squamata	Colubridae	Heterodon platyrhinos	
174187	Squamata	Colubridae	Lampropeltis triangulum	Milk Snake, Milksnake
174251	Squamata	Colubridae	Nerodia sipedon	Northern Water Snake
209400	Squamata	Colubridae	Pituophis catenifer	Bullsnake, Gopher Snake
174131	Squamata	Colubridae	Storeria occipitomaculata	Red-bellied Snake, Redbelly Snake
174147	Squamata	Colubridae	Thamnophis radix	Plains Garter Snake
174136	Squamata	Colubridae	Thamnophis sirtalis	Common Garter Snake
173959	Squamata	Scincidae	Eumeces fasciatus	Five-lined Skink
173969	Squamata	Scincidae	Eumeces septentrionalis	Prairie Skink, northern prairie skink
174014	Squamata	Teiidae	Cnemidophorus sexlineatus	Six-lined Racerunner
174319	Squamata	Viperidae	Crotalus viridis	Prairie Rattlesnake, Western Rattlesnake
173752	Testudines	Chelydridae	Chelydra serpentina	Snapping Turtle, common snapping turtle
173783	Testudines	Emydidae	Chrysemys picta	Painted Turtle
173800	Testudines	Emydidae	Graptemys pseudogeographica	False Map Turtle
173778	Testudines	Emydidae	Terrapene ornata	Western Box Turtle, ornate box turtle
208677	Testudines	Trionychidae	Apalone mutica	Smooth Softshell, smooth softshell turtle
208680	Testudines	Trionychidae	Apalone spinifera	Spiny Softshell, spiny softshell turtle
-695131	Testudines	Trionychidae	Trionyx mutica	smooth softshell

MEMORANDUM FOR: Matthew Wray, US Corps of Engineers, Omaha District

FROM: Stephen Smith, USEPA Region VII

SUBJECT: Concurrence on Purpose and Need for Nebraska Highway N-12

1. USEPA concurs with the Purpose and Needs statement for Nebraska Highway N-12. The request for this concurrence was sent to us on March 9, 2009. I have signed that concurrence on a separate document.

2. I suggest that the maps included in the Draft Chapter 1 (specifically, Figures 1-2 and 1-3) identify the Santee Spur (S54D). This is particularly important because connectivity to the Santee Spur is mentioned in the Overall Project Purpose (1.4.2) as one of the obligations to be fulfilled by the project. I believe the Santee Spur is portrayed on those two figures as a gray road immediately southeast of the words 'Bazile Creek' on the right-most third of the figures.

Concurrence: Purpose and Need

“We have reviewed the Purpose and Need for the environmental impact statement on Project 2004-10258-WEH and concur that it is satisfactory. The information provided to date is adequate and we agree that the project can be advanced to the next stage of project development.”

Signed: Steph Email
Title: NEPA Reviewer
Agency: USEPA
Date: 18 Mar 09



United States Department of the Interior

NATIONAL PARK SERVICE
Missouri National Recreational River
P.O. Box 666
Yankton, South Dakota 57078

REPLY REFER TO:

A3815 (MNRR)

March 17, 2009

Mr. Mathew Wray
Regulatory Specialist
Department of the Army
Corps of Engineers, Omaha District
Nebraska Regulatory Office – Wehrspann
8901 South 154th St. Suite 1
Omaha, Nebraska 68128-3621



Dear Mr. Wray:

Thank you for the opportunity to comment on the draft Purpose and Need for the Highway 12 project (2004-10258-WEH). The identified purpose to provide a safe and reliable transportation route through Northern Nebraska and the need to reduce roadway impacts from flooding will benefit local residents, the general public and reduce highway maintenance costs.

As detailed in the attachment, we have provided minor editorial comments and suggestions along with some clarification points on the draft Purpose and Need. With these minor corrections, we concur with the purpose and need for the project.

If you have any questions regarding our comments please feel free to contact John Macy, Hydrologist for the Missouri National Recreational River, at (605) 214-3693. We appreciate the opportunity to work with you on this project.

Sincerely,

R. Michael Madell
Superintendent

Page 1-1 Section 1.1: N-12 also parallels Ponca Creek and is located within the Ponca Creek floodplain.

Figures 1-2 and 1-3: Boundary of Missouri National Recreational River includes the lower 20 miles of the Niobrara River. Figures incorrectly labeled with Niobrara National Scenic River Boundary.

Page 1-4 Section 1.2: Clarify whether minimum design standards include two 6-foot shoulders or two 3-foot shoulders.

Page 1-5 Section 1.3: Further clarify funding and budget authorities (i.e. why if the funding was "issued" that it has "not been forthcoming").

Page 1-8 Section 1.4.2: Project purpose will not "eliminate the existing flooding problems", but it may eliminate problems caused by flooding.

Page 1-8 Section 1.5, Pages 1-9 and 1-11 Section 1.5.1: Continuous roadway maintenance implies constant activity, when actual road maintenance is periodic or annual (see Table 1-1).

Page 1-10 Section 1.5.1: Description of flows higher than 30,500 cfs does not include the years 1995 and 1996 when flows were up to 53,000 cfs in November (see Corps RCC Technical Report F-99 pp. 13-14).

Page 1-12 Section 1.5.1: Suggest that the sentence following Table 1-2 be changed to read: Due to the expected increase in surface water elevation and flooding, the subsequent need for maintenance is not likely to decrease in the future.

Page 1-12 Section 1.5.2: What is the basis for the estimate of 2,020 projected vehicles per day for 2034?

Page 1-13 Section 1.5.2: What does LOS stand for? Also, "An analysis of NDOR crash records⁹" *shows or indicates* "Segment 2..."

Page 1-15 Section 1.7.3: Project is located in the MNRR which includes the lower Niobrara River. The project is not located near the Niobrara National Scenic River boundary.

Page 1-17 Section 1.8: Suggested rewording "...is to eliminate the existing" *problems caused by flooding* "and roadway design..." And "[t]he Project is needed due to flooding" *that impacts* "the existing roadway..."

Concurrence: Purpose and Need

“We have reviewed the Purpose and Need for the environmental impact statement on Project 2004-10258-WEH and concur that it is satisfactory. The information provided to date is adequate and we agree that the project can be advanced to the next stage of project development.”

Signed:  _____

Title: Superintendent

Agency: National Park Service

Date: March 18, 2009

From: [Grell, Carey](#)
To: [Hall, Meagan](#)
Cc: [Pillard, Matt](#)
Subject: RE: N-12 roadkill data
Date: Wednesday, March 25, 2009 8:49:04 AM
Attachments: [Niobrara Hwy 12 Roadkill Survey.pdf](#)

Meagan,

We are providing the roadkill survey data (see attachment) that was collected along Highway 12 near Niobrara, with one caveat. The survey does identify many animals that were killed along Highway 12 between May and August of 2007. However, we ask that you recognize, based on other occasional roadkill observations that have been made along Highway 12 over the years, that we feel the species and numbers are likely under-represented in this survey compared to what is really occurring. Please keep in mind that several factors can affect the outcome of this type of survey, such as predators/scavengers, as it is not possible to know how many roadkill carcasses are removed by predators before they can be detected by surveyors.

Also, I am currently in the process of plotting the GPS locations from the survey to identify the spatial distribution of the survey points. If you have any questions regarding this information, please let me know.

Thanks,
Carey

From: Hall, Meagan [mailto:Meagan.Hall@hdrinc.com]
Sent: Monday, March 23, 2009 2:01 PM
To: Grell, Carey
Cc: Pillard, Matt
Subject: N-12 roadkill data

Good afternoon Carey-

I spoke with you last week regarding the roadkill data that Niobrara State Park had collected along N-12. The purpose of this email is to provide you with my correct email address to send the data and report to. I hope to hear from you soon.

Thank you,

Meagan Hall
Environmental Scientist

HDR ONE COMPANY | *Many Solutions*
8404 Indian Hills Drive | Omaha, NE | 68114-4098
Phone: 402-399-4983 | Fax: 402-399-1111
Email: meagan.hall@hdrinc.com

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Nebraska Hwy 12 Road Kill Survey

~~5-26-5~~26-07

- 1- White Tail Doe
- 2- Painted Turtles
- 1- Muskrat
- 1- Raccoon

6-06-07

- 1- Muskrat
- 2- Raccoon
- 1- White Tailed Doe
- 1- Beaver

~~6-29-6~~29-07

- 1- Raccoon
- 1- Doe
- 1- Fawn Buck

7-10-07

- 2- White Tail Does
- 2- Raccoon
- 1- Turtle

7-23-07

- 1- Possum
- 1- Raccoon
- 1- Skunk
- 1- White Tailed Fawn

8-08-07

- 6- Raccoon
- 2- White Tailed Fawn
- 1- Skunk

8-18-07

- 1- Beaver

8-21-07

- 2- White Tailed Fawn
- 1- Raccoon

8-28-07

- 1- White Tailed Fawn
- 1- Raccoon

Niobrara Hwy 12, Road Kill Survey

This information will be used to determine where and what type of wildlife crossings are necessary for the new Highway 12. We are interested in turtles, other reptiles, amphibians and mammals. If the species is unknown, record what you can. The carapace length (for turtles only) is measured using a caliper (or straight ruler) from head to tail area. If too damaged, please give an estimate of small, medium, large which will provide information as to the age of the turtle. To prevent recording the same road kill more than 1x, the carcass should be removed from the road if safe or marked in some way (spray paint) to prevent double recording. Conducting the survey first thing in the morning will capture more data as some will be removed by scavengers throughout the day. In the additional comments section, we are interested in your observations. Please provide anything that will help guide what actions will reduce the impacts of the new road. For your safety, an orange vest is provided. Surveys should be done weekly through September.

Survey Date: 5-26-07

Surveyor: R Eberly

	Species	GPS Location	Carapace Length (cm)	Additional Comments (optional)
	<i>example: Muskrat</i>	<i>97.9975, 42.7523</i>		<i>There is a muskrat lodge about 200 yards east of this location and there are wetlands on both sides of the road this time of year.</i>
1	WhiteTail Doe	N42 45.319 W 097 57.230		NSP to Ohiya Casino East
2	Painted Turtle	N42 45.382 W 097 56.828		NSP to Ohiya Casino East
3	Muskrat	N42 45.167 W 097 58.062		NSP to Ohiya Casino East
4	Painted Turtle	N 42 45.160 W 098 00.857		NSP to Ohiya Casino East
5	Raccoon	N42 48.414 W 098 09.391		NSP West to 517 Ave
6				
7				
8				
9				
10				
11				

Niobrara Hwy 12, Road Kill Survey

This information will be used to determine where and what type of wildlife crossings are necessary for the new Highway 12. We are interested in turtles, other reptiles, amphibians and mammals. If the species is unknown, record what you can. The carapace length (for turtles only) is measured using a caliper (or straight ruler) from head to tail area. If too damaged, please give an estimate of small, medium, large which will provide information as to the age of the turtle. To prevent recording the same road kill more than 1x, the carcass should be removed from the road if safe or marked in some way (spray paint) to prevent double recording. Conducting the survey first thing in the morning will capture more data as some will be removed by scavengers throughout the day. In the additional comments section, we are interested in your observations. Please provide anything that will help guide what actions will reduce the impacts of the new road. For your safety, an orange vest is provided. Surveys should be done weekly through September.

Survey Date: 6 -06-07

Surveyor: R Eberly

Species	GPS Location	Carapace Length (cm)	Additional Comments (optional)
<i>example: Muskrat</i>	<i>97.9975, 42.7523</i>		<i>There is a muskrat lodge about 200 yards east of this location and there are wetlands on both sides of the road this time of year.</i>
1	Muskrat, Nth edge of road,	sex not determined,	cattails/ wetlands both N & S road ditches -
2	N 42 47.793	W098 07.295.	
3	Raccoon, female, south edge of road,	cornfields both sides of road-	N 42 .651 W098.10.733
4	Raccoon, N side of the road,	sex not dteremined,	Wetlands both sides of road - N42 48.652 W098 10.264
5	White Tail Doe, Nth edge of road,	Wooded area and wetlands both sides of road.	N42 45.342 W097 57.127
6	Beaver, male, Nth edge Hwy,	water in road ditch Nth & Sth side of road.	Beaver dam 100 yards Nth
7	off shot of Niobrara River.	N42 44.894	W098 02.628
8			
9			
10			
11			

Niobrara Hwy 12, Road Kill Survey

This information will be used to determine where and what type of wildlife crossings are necessary for the new Highway 12. We are interested in turtles, other reptiles, amphibians and mammals. If the species is unknown, record what you can. The carapace length (for turtles only) is measured using a caliper (or straight ruler) from head to tail area. If too damaged, please give an estimate of small, medium, large which will provide information as to the age of the turtle. To prevent recording the same road kill more than 1x, the carcass should be removed from the road if safe or marked in some way (spray paint) to prevent double recording. Conducting the survey first thing in the morning will capture more data as some will be removed by scavengers throughout the day. In the additional comments section, we are interested in your observations. Please provide anything that will help guide what actions will reduce the impacts of the new road. For your safety, an orange vest is provided. Surveys should be done weekly through September.

Survey Date: 6-29-07

Surveyor: R. Ebeling

Species	GPS Location	Carapace Length (cm)	Additional Comments (optional)
example: Muskrat	97.9975, 42.7523		There is a muskrat lodge about 200 yards east of this location and there are wetlands on both sides of the road this time of year.
1 RACCOON	N42 45 218	W097 57 927	6/29/07 Wetlands Both sides Could not determine sex or direction of travel
2			
3			
4 Doe	N42° 48.037	W.098° 07.939	
5 FAWN-BUCK	N42° 46.193	W.098 05.063	
6			
7			
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9			
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11			

Niobrara Hwy 12, Road Kill Survey

This information will be used to determine where and what type of wildlife crossings are necessary for the new Highway 12. We are interested in turtles, other reptiles, amphibians and mammals. If the species is unknown, record what you can. The carapace length (for turtles only) is measured using a caliper (or straight ruler) from head to tail area. If too damaged, please give an estimate of small, medium, large which will provide information as to the age of the turtle. To prevent recording the same road kill more than 1x, the carcass should be removed from the road if safe or marked in some way (spray paint) to prevent double recording. Conducting the survey first thing in the morning will capture more data as some will be removed by scavengers throughout the day. In the additional comments section, we are interested in your observations. Please provide anything that will help guide what actions will reduce the impacts of the new road. For your safety, an orange vest is provided. Surveys should be done weekly through September.

Survey Date: 7-10-07

Surveyor: R. Eberly

Species	GPS Location	Carapace Length (cm)	Additional Comments (optional)
example: Muskrat	97.9975, 42.7523		There is a muskrat lodge about 200 yards east of this location and there are wetlands on both sides of the road this time of year.
1 White Tail Doe	42° 45.142 W 98° 00.086		2-3 yr Wetlands both sides of Road
2 RACCOON	42° 45.110 W 97° 59.751		Medium " "
3 RACCOON	42° 45.216 W 97° 57.979		Small " "
4 Turtle	42° 44.892 W 98° 02.630		Smashed " "
5 White Tail Doe	42° 46.194 W 98° 05.06		Pasture Both Sides of Road Could not determine Age
6			
7			
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Niobrara Hwy 12, Road Kill Survey

This information will be used to determine where and what type of wildlife crossings are necessary for the new Highway 12. We are interested in turtles, other reptiles, amphibians and mammals. If the species is unknown, record what you can. The carapace length (for turtles only) is measured using a caliper (or straight ruler) from head to tail area. If too damaged, please give an estimate of small, medium, large which will provide information as to the age of the turtle. To prevent recording the same road kill more than 1x, the carcass should be removed from the road if safe or marked in some way (spray paint) to prevent double recording. Conducting the survey first thing in the morning will capture more data as some will be removed by scavengers throughout the day. In the additional comments section, we are interested in your observations. Please provide anything that will help guide what actions will reduce the impacts of the new road. For your safety, an orange vest is provided. Surveys should be done weekly through September.

Survey Date: 7-23-07

Surveyor: R. Eberly

Species	GPS Location	Carapace Length (cm)	Additional Comments (optional)
example: Muskrat	97.9975, 42.7523		There is a muskrat lodge about 200 yards east of this location and there are wetlands on both sides of the road this time of year.
1 POSSUM	N42 44.884	W098 63.371	River both sides of Road
2 COON	N42 45.157	W098 00.216	Wet Lands both sides of road
3 SKUNK	N 42 45.219	W097 57.928	Wet Lands both sides of road
4 ^{White Tail} FAWN	N 42 48 139	W 098 08 298	Wet lands both sides of Road
5			
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Niobrara Hwy 12, Road Kill Survey

This information will be used to determine where and what type of wildlife crossings are necessary for the new Highway 12. We are interested in turtles, other reptiles, amphibians and mammals. If the species is unknown, record what you can. The carapace length (for turtles only) is measured using a caliper (or straight ruler) from head to tail area. If too damaged, please give an estimate of small, medium, large which will provide information as to the age of the turtle. To prevent recording the same road kill more than 1x, the carcass should be removed from the road if safe or marked in some way (spray paint) to prevent double recording. Conducting the survey first thing in the morning will capture more data as some will be removed by scavengers throughout the day. In the additional comments section, we are interested in your observations. Please provide anything that will help guide what actions will reduce the impacts of the new road. For your safety, an orange vest is provided. Surveys should be done weekly through September.

Survey Date: 8-08-07

Surveyor: R. Eledy

Species	GPS Location	Carapace Length (cm)	Additional Comments (optional)
example: Muskrat	97.9975, 42.7523		There is a muskrat lodge about 200 yards east of this location and there are wetlands on both sides of the road this time of year.
1 Coon	N4247.704 W098°07.095		Wetlands both sides of road
2 MUSKRAT	N4247.498 W098°06.650		" "
3 ^{White Tail} FAWN	N4245163 W098°00.977		" "
4 ^{White Tail} FAWN	N4245152 W098°00.183		" "
5 SKUNK	N4245137 W097.58155		" "
6 COON	N4245216 W097.57925		" "
7 COON	N4245281 W097.57432		" "
8 COON	N4245377 W097.56837		" "
9 2 COON	N4245379 W097.56731		" "
10			
11			

Niobrara Hwy 12, Road Kill Survey

This information will be used to determine where and what type of wildlife crossings are necessary for the new Highway 12. We are interested in turtles, other reptiles, amphibians and mammals. If the species is unknown, record what you can. The carapace length (for turtles only) is measured using a caliper (or straight ruler) from head to tail area. If too damaged, please give an estimate of small, medium, large which will provide information as to the age of the turtle. To prevent recording the same road kill more than 1x, the carcass should be removed from the road if safe or marked in some way (spray paint) to prevent double recording. Conducting the survey first thing in the morning will capture more data as some will be removed by scavengers throughout the day. In the additional comments section, we are interested in your observations. Please provide anything that will help guide what actions will reduce the impacts of the new road. For your safety, an orange vest is provided. Surveys should be done weekly through September.

Survey Date: 8-18-07

Surveyor: R Eberly

Species	GPS Location	Carapace Length (cm)	Additional Comments (optional)
example: Muskrat	97.9975, 42.7523		There is a muskrat lodge about 200 yards east of this location and there are wetlands on both sides of the road this time of year.
1 Beaver	N4246.262	W109805306	Wetlands both sides of road
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			

Niobrara Hwy 12, Road Kill Survey

This information will be used to determine where and what type of wildlife crossings are necessary for the new Highway 12. We are interested in turtles, other reptiles, amphibians and mammals. If the species is unknown, record what you can. The carapace length (for turtles only) is measured using a caliper (or straight ruler) from head to tail area. If too damaged, please give an estimate of small, medium, large which will provide information as to the age of the turtle. To prevent recording the same road kill more than 1x, the carcass should be removed from the road if safe or marked in some way (spray paint) to prevent double recording. Conducting the survey first thing in the morning will capture more data as some will be removed by scavengers throughout the day. In the additional comments section, we are interested in your observations. Please provide anything that will help guide what actions will reduce the impacts of the new road. For your safety, an orange vest is provided. Surveys should be done weekly through September.

Survey Date: 8/21/07

Surveyor: R. Eberly

Species	GPS Location	Carapace Length (cm)	Additional Comments (optional)
example: Muskrat	97.9975, 42.7523		There is a muskrat lodge about 200 yards east of this location and there are wetlands on both sides of the road this time of year.
1 FAWN White Tail	N 42° 48.536	W 098° 09.615	Creek both sides of ROAD
2 COON	N 42° 45.282	W 097° 59.429	Wetlands both sides of ROAD
3 FAWN White Tail	N 42° 45.157	W 098° 00.181	" "
4			
5			
6			
7			
8			
9			
10			
11			

Niobrara Hwy 12, Road Kill Survey

This information will be used to determine where and what type of wildlife crossings are necessary for the new Highway 12. We are interested in turtles, other reptiles, amphibians and mammals. If the species is unknown, record what you can. The carapace length (for turtles only) is measured using a caliper (or straight ruler) from head to tail area. If too damaged, please give an estimate of small, medium, large which will provide information as to the age of the turtle. To prevent recording the same road kill more than 1x, the carcass should be removed from the road if safe or marked in some way (spray paint) to prevent double recording. Conducting the survey first thing in the morning will capture more data as some will be removed by scavengers throughout the day. In the additional comments section, we are interested in your observations. Please provide anything that will help guide what actions will reduce the impacts of the new road. For your safety, an orange vest is provided. Surveys should be done weekly through September.

Survey Date: 8-28-07

Surveyor: REberly

Species	GPS Location	Carapace Length (cm)	Additional Comments (optional)
example: Muskrat	97.9975, 42.7523		There is a muskrat lodge about 200 yards east of this location and there are wetlands on both sides of the road this time of year.
1 White Tail Fawn	N42°47'920 W098°07.576		Wetlands both sides of road
2 COON	N42°45'387 W097°56.892		" " "
3			
4			
5			
6			
7			
8			
9			
10			
11			

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United States Department of the Interior

NATIONAL PARK SERVICE
Missouri National Recreational River
P.O. Box 666
Yankton, South Dakota 57078

REPLY REFER TO:
D3219 (MNRR)

April 17, 2009

Mr. Mathew Wray
Corps of Engineers, Omaha District
Nebraska Regulatory Office – Wehrspann
8901 South 154th St. Suite 1
Omaha, Nebraska 68128-3621



RE: 2004-10258-WEH
N-12 Niobrara East & West Project
Concurrence in Range of Alternatives for Environmental Impact Statement

Dear Mr. Wray:

Thank you for the opportunity to comment on the draft Range of Alternatives for the N-12 Niobrara East and West Project (2004-10258-WEH). The proposed range of alternatives adequately covers possible actions that will maintain a travel route in Northern Nebraska, benefit local residents and the general public, and reduce highway maintenance costs.

Alternatives that provide better hydrologic connectivity among the streams, wetlands, and the entire Ponca Creek and Missouri River floodplains will be the most beneficial to the aquatic ecosystem, whether they are relocating the roadway or placing the roadway on piers. We offer the following minor editorial comments and suggestions with comments on the draft Range of Alternatives.

Comments on Nebraska Highway 12 Draft Range of Alternatives

- **Page 2-1, First sentence:** "... to support of the Corps' Section 404 permit decision." Maybe should read *...in support of or to support* the Corps' Section 404...
- **Sec. 2.1.3, Page 2-2: Approach to Alternative Analysis**
Comment: Reference to 40 CFR 230.10(a)(3) should be included in this discussion. This section of the 404(b)(1) guidelines identifies the presumption that practicable alternatives exist to discharges into special aquatic sites such as wetlands and does not suggest that cost alone would determine practicability.
- **Sec. 2.3.1, Page 2-3: Concept A, Roadway Alignments...**
Suggested wording for second sentence – In order to relieve the flood hazard currently associated with N-12, *Concept A identifies construction of a roadway raised to an elevation sufficient to allow...during the 100-year flood event.*

Comment: It may be more appropriate to base elevation of a newly constructed roadway from analysis of expected sediment deposition and subsequent rising water levels over the design-life of the newly constructed roadway. It is important that an alternative developed under Concept A include a fleshed-out piered-roadway design to adequately address natural flow patterns and water circulation (40 CFR 230.23).

- **Sec. 2.3.1, Page 2-4:** Concept B, Roadway Alignments...

Third paragraph suggested wording – The Pierre shale ...make it prone to *failure* even in mildly sloping conditions. ... Second, the shale is *thin-bedded* clay...
Final sentence this paragraph – The result is a *potential for mass failure*.

- **Sec 2.3.2, Page 2-6:** Alternative A1, Elevation Raise...

First paragraph – This alternative...during the 100-year *flood* event...

Comment: See comment for Sec. 2.3.1 above regarding elevation of new roadway.

- **Sec 2.3.2, Pages 2-12, 2-15, 2-20:**

Comment: Abandonment of the old roadway should not occur with only the removal of the asphalt surface and culverts. Complete removal of road fill to the elevation of the existing adjacent floodplain should be considered for natural current patterns and water circulation (40 CFR 230.23). This would also apply to the proposal to leave the existing N-12 embankment in areas where the proposed alignment is south of the existing alignment. Depending on the alternative subsets (e.g. piered-roadway design), failure to remove the existing embankment would further reduce hydrologic connectivity.

- **Sec 2.3.2, Page 2-15:**

Comment: See comment for Sec. 2.3.1 above regarding elevation of new roadway.

- **Sec 2.3.2, Page 2-20:** Alternative C1, Sediment Removal...

Comment: The sources of sediment remain even after a “flushing” flow so this alternative needs to address the issue of yearly sediment loads continuing into the future.

We appreciate the opportunity to work with you on this project and believe that the collaborative process will yield a better environmental document and on-the-ground product. If you have any questions regarding our comments please feel free to contact me or my staff at the Missouri National Recreational River.

Sincerely,



R. Michael Madell
Superintendent

cc: NPS-LECL (Gucciardo)



Nebraska Game and Parks Commission

2200 N. 33rd St. / P.O. Box 30370 / Lincoln, NE 68503-0370

Phone: 402-471-0641 / Fax: 402-471-5528 / www.OutdoorNebraska.org

April 20, 2009

Matt Wray
U.S. Army Corps of Engineers
8901 South 154th Street, Suite 1
Omaha, NE 68138-3621

RE: N-12 Niobrara East & West Project, Concurrence Point 2a, Range of Alternatives for Environmental Impact Statement

Dear Mr. Wray:

Nebraska Game and Parks Commission (NGPC) staff members have reviewed the information provided on the range of alternatives for the N-12 Niobrara East and West road project.

We also noted, as stated in the information you sent, that the concept of adding larger bridges and/or culverts to the alternatives in the floodplain to create a piers roadway that would minimize wetland impacts and enhance floodplain connectivity was not included at this step in the NEPA/404 merge review process. The provided information went on to state that the concept is currently being reviewed and there would be no new alternatives developed to address this, but any modifications would rather be identified as additions to the already presented floodplain alternatives, and that the potential modifications and a full evaluation would be provided at the next step of agency review and concurrence. We look forward to reviewing the potential bridging modifications to the floodplain alternatives, and we hope that none of these potential modifications are eliminated prior to the agencies having an opportunity for review at the next Concurrence Point, CP 2b.

Thank you for the opportunity to review the range of alternatives for this project. If you have any questions, or require additional information, please contact me at (402) 471-5423 or carey.grell@nebraska.gov.

Sincerely,

Carey Grell
Environmental Analyst
Realty and Environmental Services Division

Concurrence: Range of Alternatives

"We have reviewed the Range of Alternatives for the environmental impact statement on Project 2004-10258-WEH and concur that it is satisfactory. The information provided to date is adequate and we agree that the project can be advanced to the next stage of project development."

Signed: Cary Gwell
Title: Environmental Analyst
Agency: NE. Game + Parks Commission
Date: 4-20-09

From: Stephen_K_Wilson@nps.gov
To: Marinovich_Melissa
Subject: Re: Just checking in again
Date: Tuesday, June 30, 2009 7:59:02 AM
Attachments: [LTPP_NiobraraRiver_Census03-09_NPS.xlsx](#)
[022309_niobraraLTPP.ppt](#)

Hi Melissa, I pulled the Census numbers together, but need to pull the nesting numbers, site distribution, fledglings etc., together. I have put my powerpoint as an attachment which you can look at. I know you can see the data that was used to create the figures/tables but I consider these data provisional as I am in the process of writing a 2003-2009 status report on least terns and piping plovers on the Niobrara River.

Please clarify the use of these data.

Stephen

Stephen K. Wilson
Resource Management/GIS Specialist
Missouri National Recreational River
P.O. Box 666
Yankton, SD 57078

605 665 0209 phone
605 237 3160 cell
605 665 4183 fax

"Marinovich, Melissa"
<Melissa.Marinovich@hdrinc.com>

05/20/2009 04:02 PM

To "Stephen_K_Wilson@nps.gov" <Stephen_K_Wilson@nps.gov>
cc
Subject Just checking in again

Hi Stephen,

Bird season is kicking off and our project timelines have started running quite a bit faster than the last time I contacted you. Below is the last correspondence I sent you and received from you. Could you please revisit my requests as soon as possible? For the N-12 project we are hoping produce a Draft EIS by August, which means I really have to kick it into high gear with the BA and biological status sections. Thanks again!

Melissa Marinovich
Environmental Scientist

Sent: 4/16/09

Thanks a lot, Stephen, and congratulations on the new baby! With respect to the N-12 project, we are only interested in the information for the 15 mile segment (Pischelville Bridge to Missouri) at this time

for analysis in the BA. I am especially interested in the section of the river from the Verdigre Creek confluence to the Missouri confluence, if any nesting or foraging occurs there. Also, for the Loup FERC re-licensing project, we are interested in overall population trends on the Niobrara River and what management practices have been enacted to improve population status. Thanks again for your help. Let me know if you have any additional questions.

Melissa

From: Stephen_K_Wilson@nps.gov [mailto:Stephen_K_Wilson@nps.gov]
Sent: Thursday, April 16, 2009 3:28 PM
To: Marinovich, Melissa
Subject: Re: FW: Tern and Plover Niobrara River data

Sorry for the delay. I actually haven't been in the office much with a new baby at home. I will work on the numbers for you next week, but quickly the NPS completes weekly nesting/productivity surveys on the lower 15 miles of the Niobrara River (Pischelville Bridge to Missouri River). Nests are located and followed until hatch, and then broods are followed until fledging. An adult census is completed in mid-June. The aforementioned survey began in 2003 and continues today.

Beginning in 2005, we began censusing the lower 40 miles of Niobrara River and continue today. The Nebraska Public Power District completes a census upstream from Spencer Dam to HWY 137, at which point the NPS continues the census to Norden Bridge. I am not sure if you want this detail that far up from HWY 12... If you do let me know.

Stephen

Stephen K. Wilson
Resource Management/GIS Specialist
Missouri National Recreational River
P.O. Box 666
Yankton, SD 57078

402 667 5524 phone
402 667 5536 fax

"Marinovich, Melissa" <Melissa.Marinovich@hdrinc.com>

04/15/2009 12:10 PM

To "Stephen_K_Wilson@nps.gov"
<Stephen_K_Wilson@nps.gov>

cc

Subject FW: Tern and Plover Niobrara River data

Dear Stephen,

I sent you the attached email back in March and hadn't heard back from you. I'm sure you've been extremely busy with bird migration season fired up and a slough of other tasks. I have a few questions, just to clarify what is available. What types of tern and plover count information does NPS collect/have on the Niobrara River (eg. Adult counts, nest counts, fledge ratios, etc.)? For which segments of the river are you responsible to survey? For which years do you have data collected? I am trying to collect information on the Niobrara River to discuss the status and distribution of these species in biological assessments I am preparing for the afore mentioned projects. Your assistance in this collection of data would be greatly appreciated. Thank you for your time and let me know if you have any questions. Thanks again!

Melissa

From: Marinovich, Melissa
Sent: Friday, March 20, 2009 9:13 AM
To: 'Stephen_K_Wilson@nps.gov'
Subject: Tern and Plover Niobrara River data

Hi Stephen,

I received your name from the NE Game and Parks Commission with regards to tern and plover data on the Niobrara River. I am currently involved in two projects with potential tern and plover issues. The Nebraska Highway N-12 USACE EIS (Niobrara east and west) and the Loup Hydroelectric FERC Relicensing Project. A portion of my involvement in both of these projects is to develop biological assessments for the projects. I am also helping to develop study plans on the Loup project. We are currently in the process of collecting tern and plover census/bird/nest count data for the last 22 years on all of the Nebraska rivers and was told you were the keeper of all data from the Niobrara River. Could you please share the nest/bird count data for terns and plovers that has been collected on the Niobrara River from 1987-2008?

We hope to develop meaningful studies based on the most recent and best available information. Your assistance in these endeavors is much appreciated. I understand the sensitive nature of the information and would like to assure you that this information will be used for analytical purposes only and location specific data will not be published without the permission of the National Park Service.

Thank you for your time and if you have any questions please feel free to contact me. Thanks!

Melissa Marinovich
Environmental Scientist

HDR ONE COMPANY | *Many Solutions*
8404 Indian Hills Drive | Omaha, NE | 68114-4098
Phone: 402.399.1317 | Fax: 402.399.1111
Email: melissa.marinovich@hdrinc.com

RM 0-15 (Adult Census-Total Count)

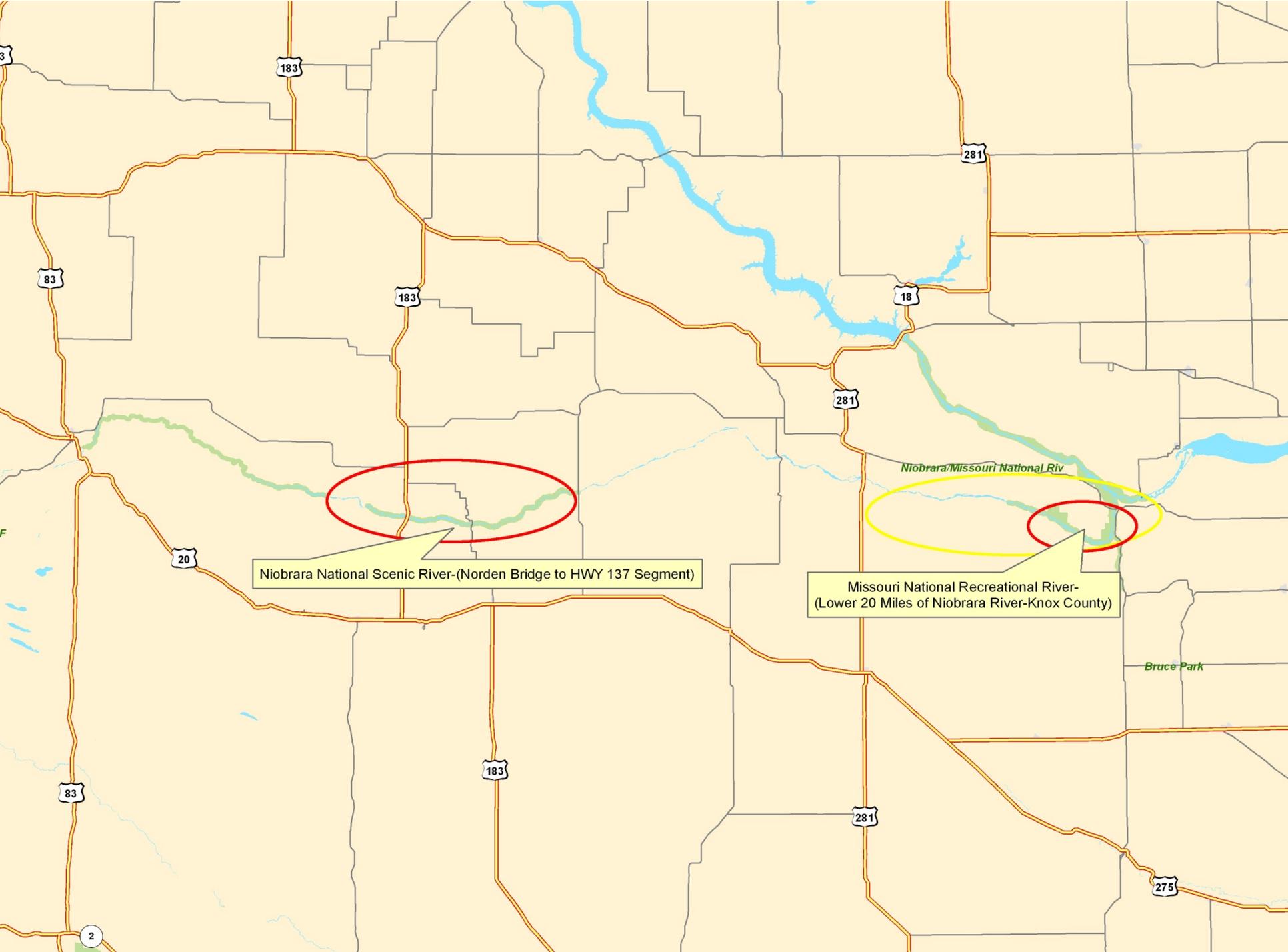
	2003	2004	2005	2006	2007	2008	2009
Piping Plover	24	36	9	54	23	31	40
Least Tern	40	64	12	112	42	30	30

RM 0-39 (Adult Census-Total Count)

	1991	1996	2001	2005	2006	2007	2008	2009
Piping Plover	49	42	32	41	98	70	51	86
Least Tern	n/a	n/a	n/a	84	183	103	72	94

NOTE: 1991, 1996, 2001 International Piping Plover Census Completed by Nebraska Game and Parks Commission

Summary of Least Tern and Piping Plover Nesting on the Lower Niobrara River



Niobrara National Scenic River-(Norden Bridge to HWY 137 Segment)

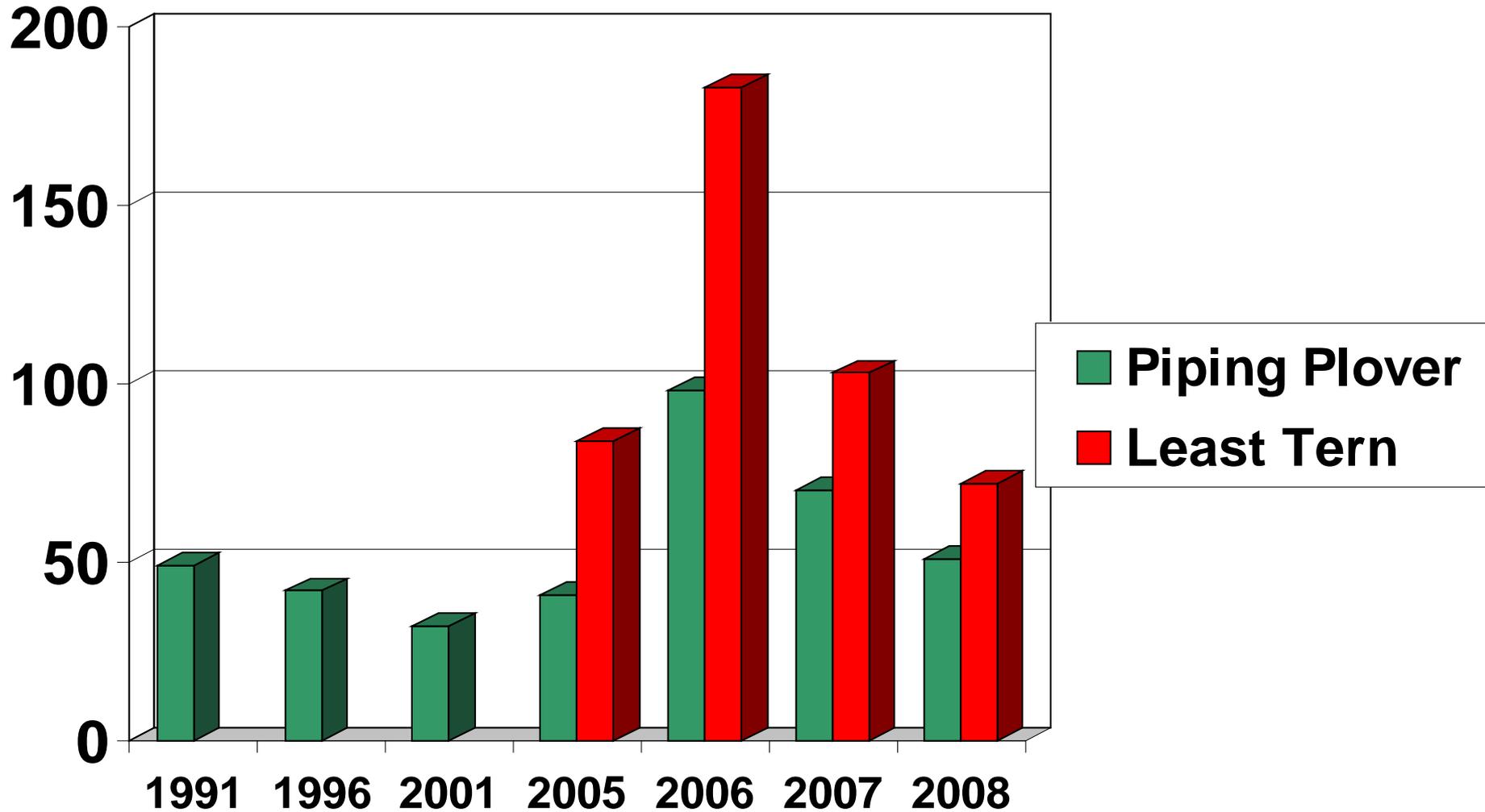
Missouri National Recreational River-
(Lower 20 Miles of Niobrara River-Knox County)

Niobrara/Missouri National Riv

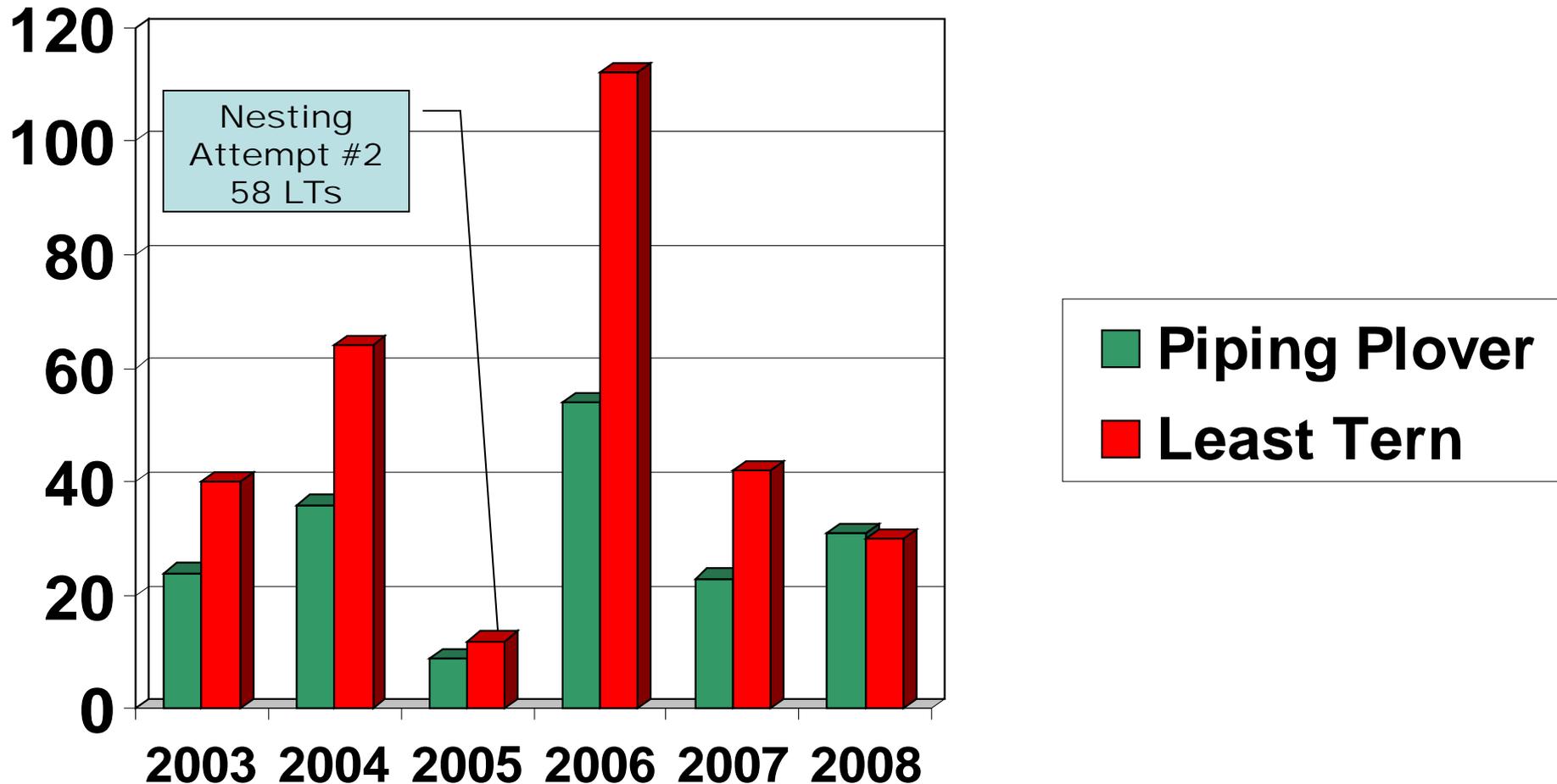
Bruce Park

Summary 2003-2008

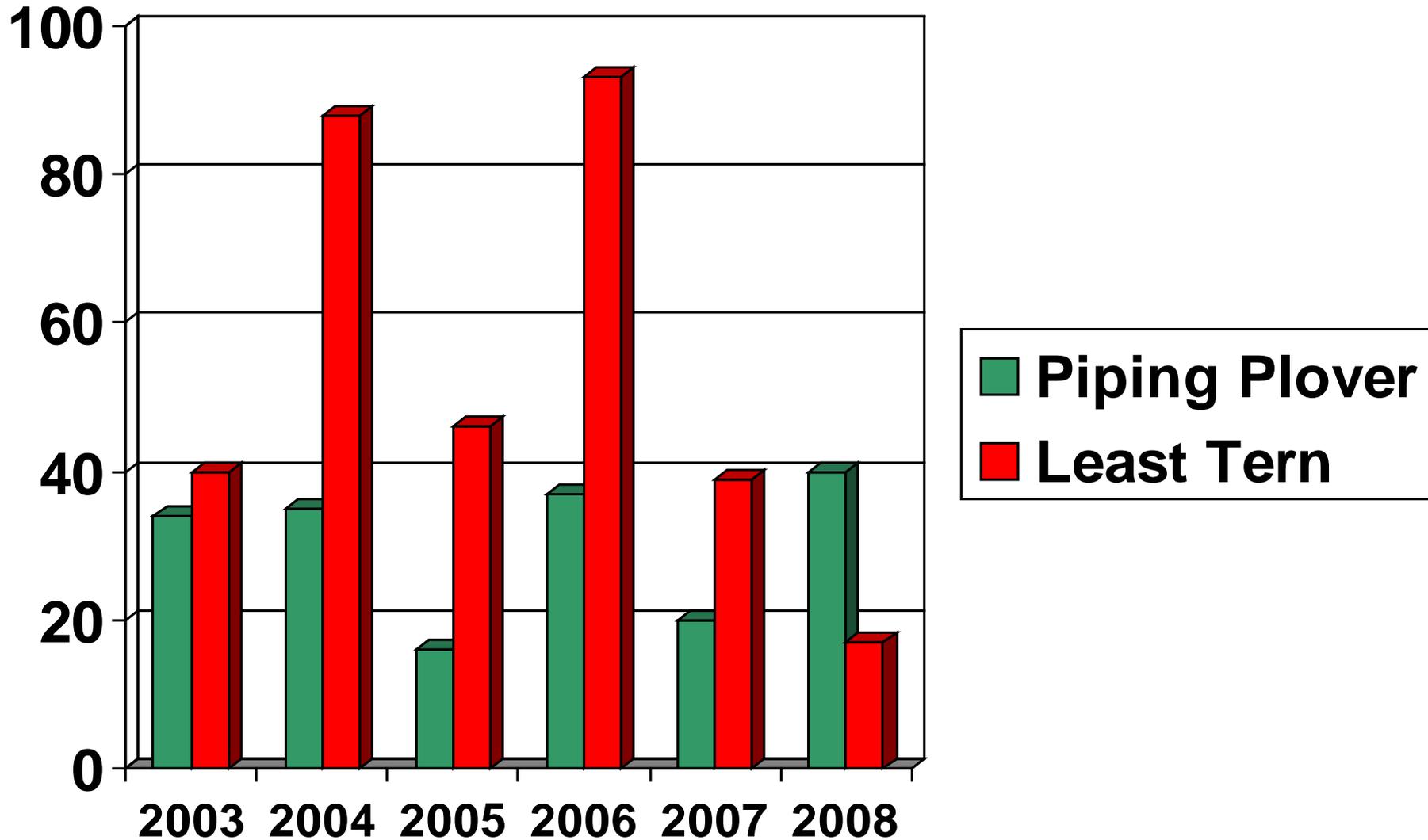
Lower Niobrara Census (RM 0-39)



Lower Niobrara Census (RM 0-15)



Lower Niobrara Nest Numbers



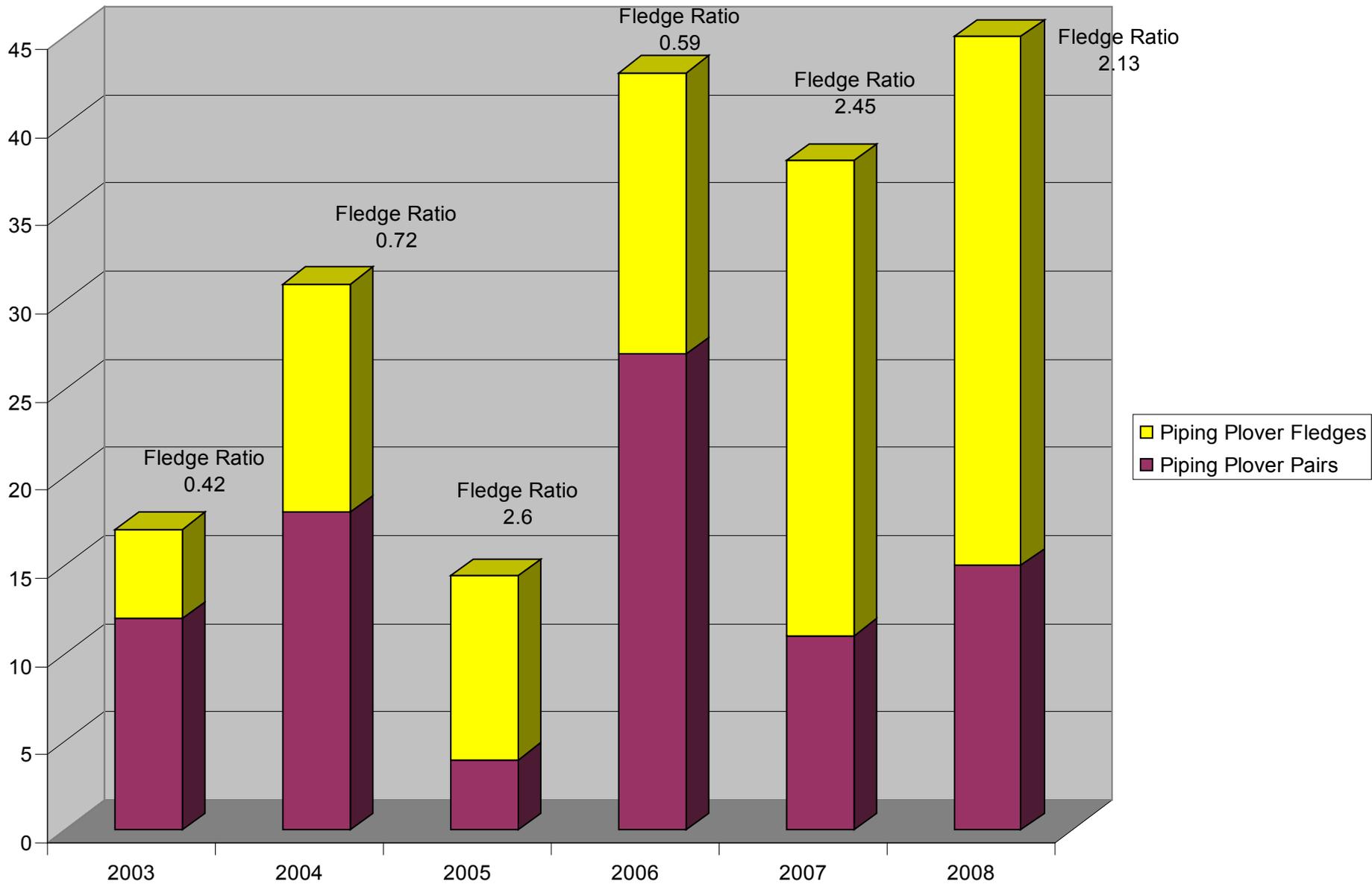
Piping Plover Nest Fate

Nest Fate	Piping Plover					
	2003	2004	2005	2006	2007	2008
Total Number of Nests Found	34	35	16	37	20	40
Number Hatched	2	10	5	15	8	14
Number Destroyed or Abandoned	28	23	11	10	8	23
Cause of Termination						
Abandon	0	0	0	2	2	2
Predator	3	7	3	1	1	0
Flooding	12	4	6	0	0	0
Weather	11	4	0	5	0	13
Erosion	1	2	1	2	0	2
Unknown	0	6	1	0	4	6
Human	0	0	0	0	1	0
Fate Unknown	4	2	0	12	4	3

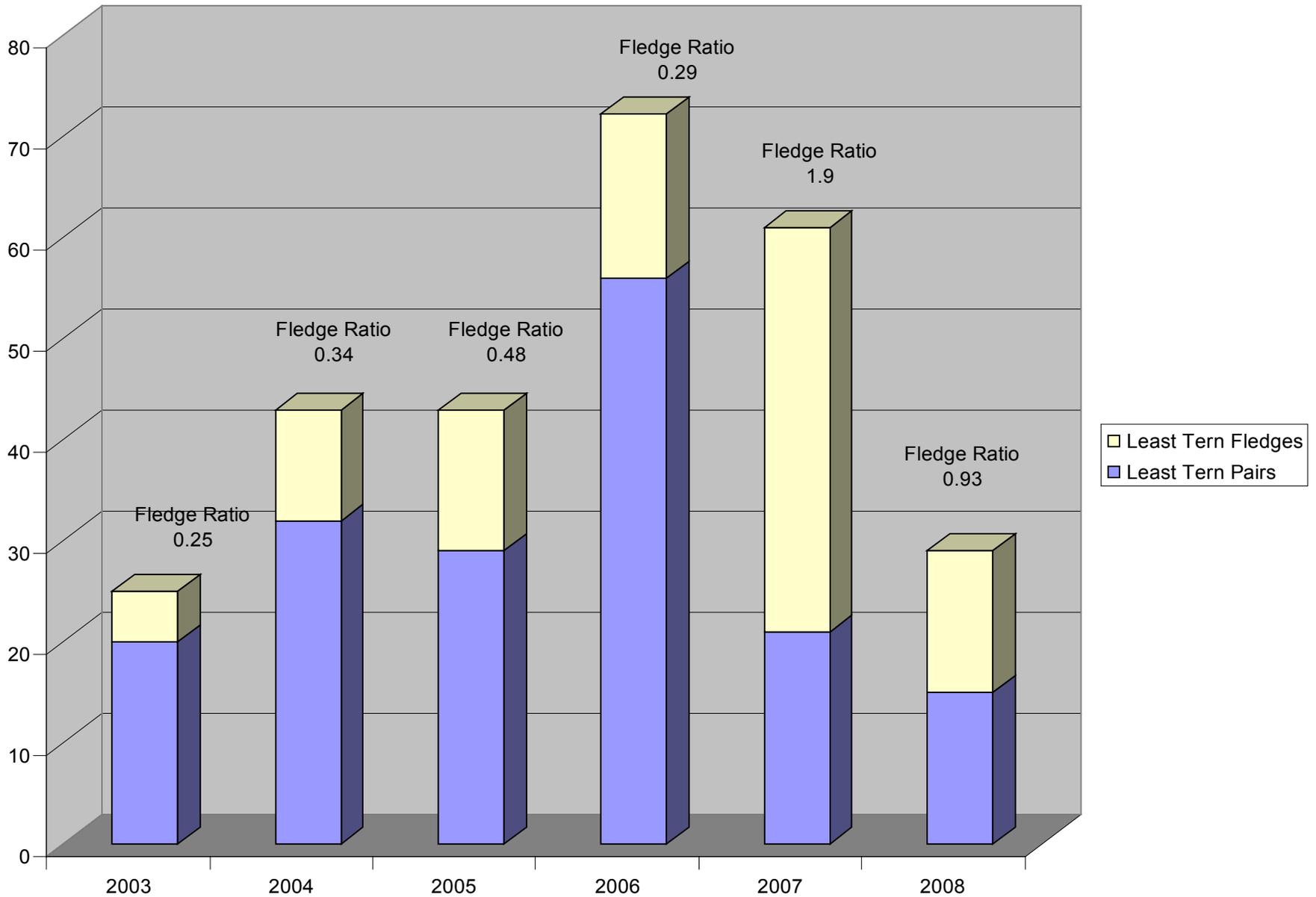
Least Tern Nest Fate

Nest Fate	Least Tern					
	2003	2004	2005	2006	2007	2008
Total Number of Nests Found	40	88	46	93	39	17
Number Hatched	4	20	21	52	24	8
Number Destroyed or Abandoned	30	61	25	20	15	6
Cause of Termination						
Abandon	0	1	1	2	4	4
Predator	1	8	7	0	2	0
Flooding	20	18	15	0	0	0
Weather	7	27	0	9	2	1
Erosion	1	0	0	6	0	0
Unknown	0	7	0	3	0	1
Human	0	0	0	0	7	0
Fate Unknown	6	7	1	21	0	3

Lower Niobrara Productivity



Lower Niobrara Productivity

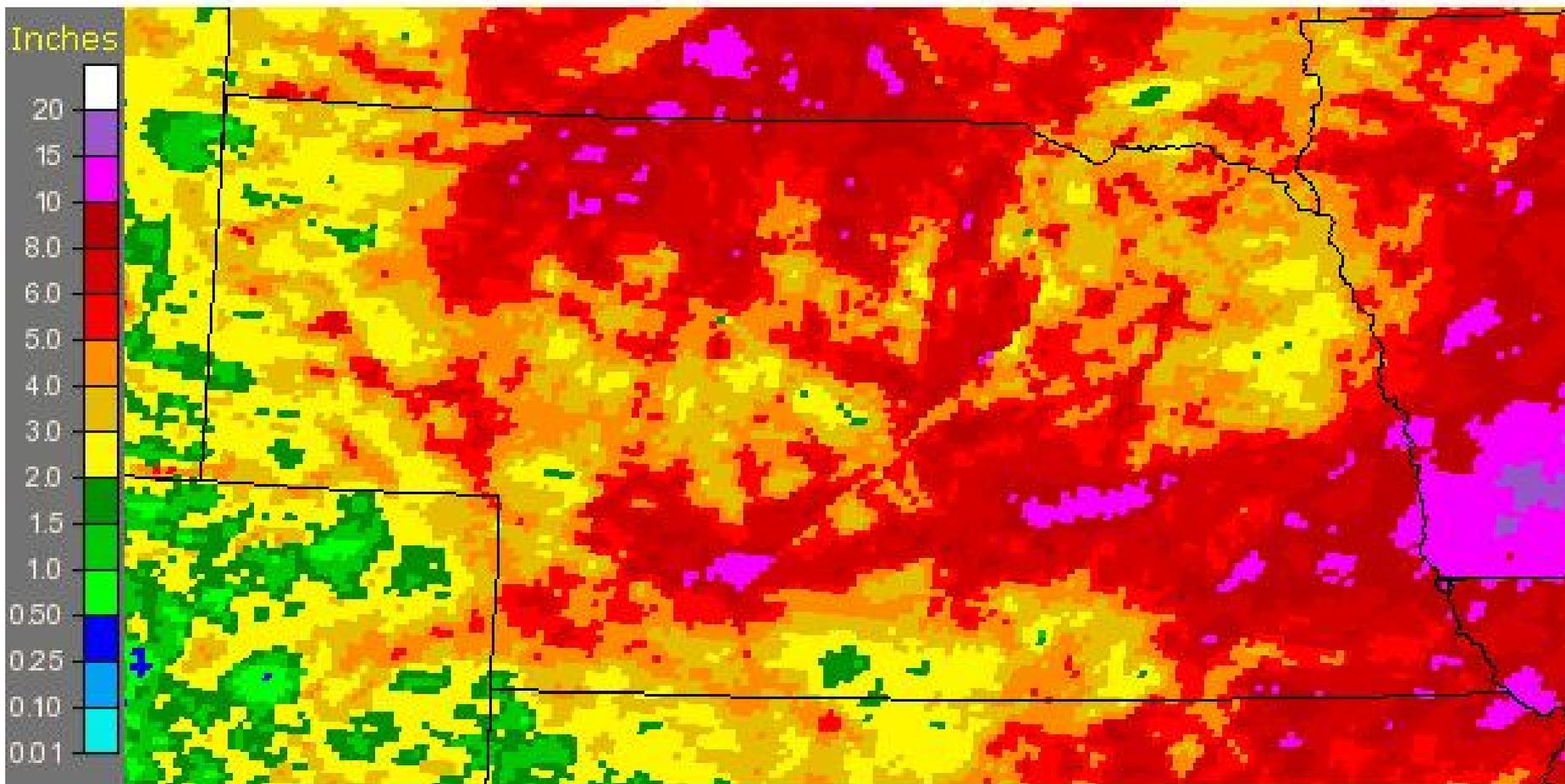


What Happened in 2007?

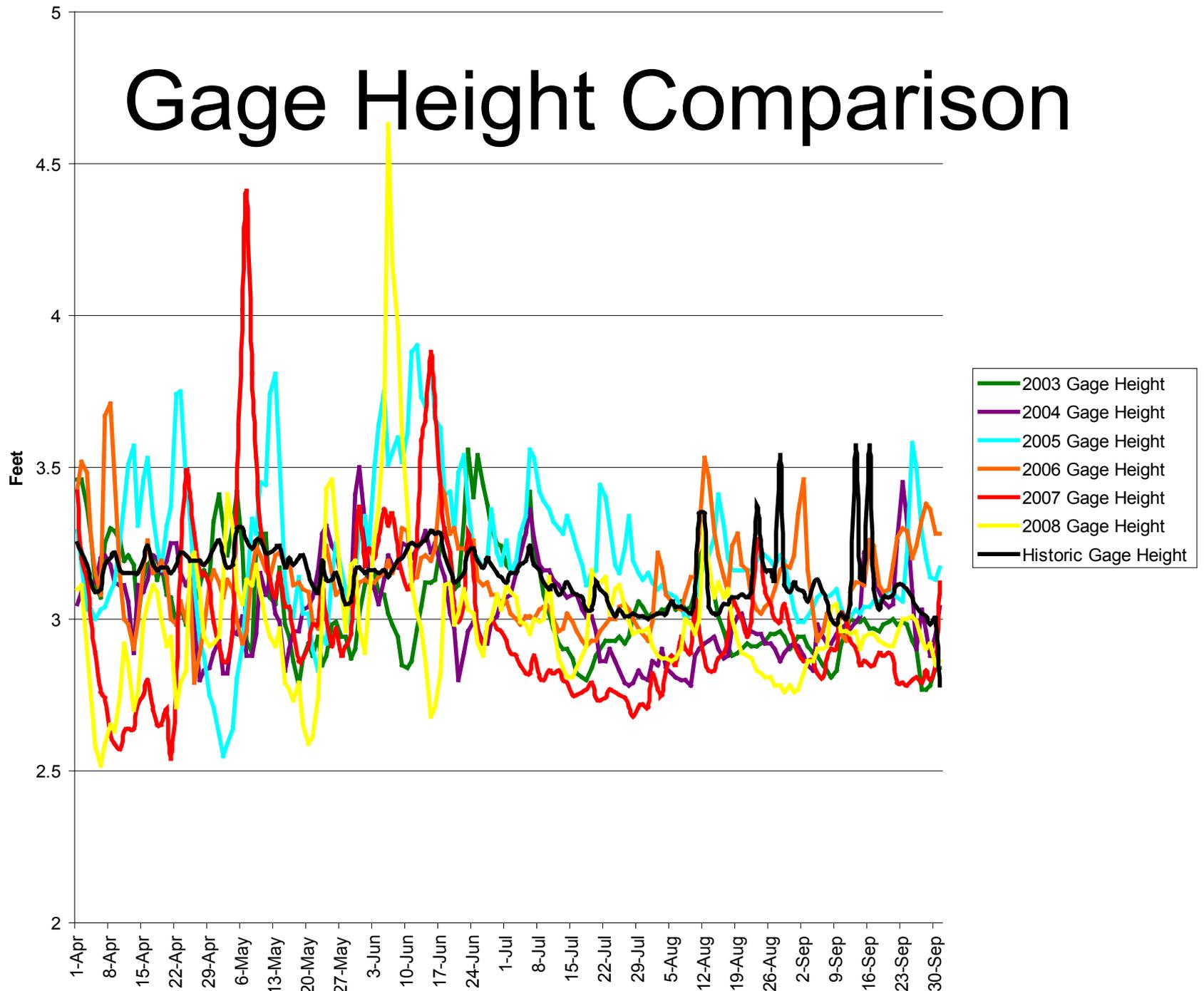
What Happened in 2008?

Niobrara Drainage Precipitation

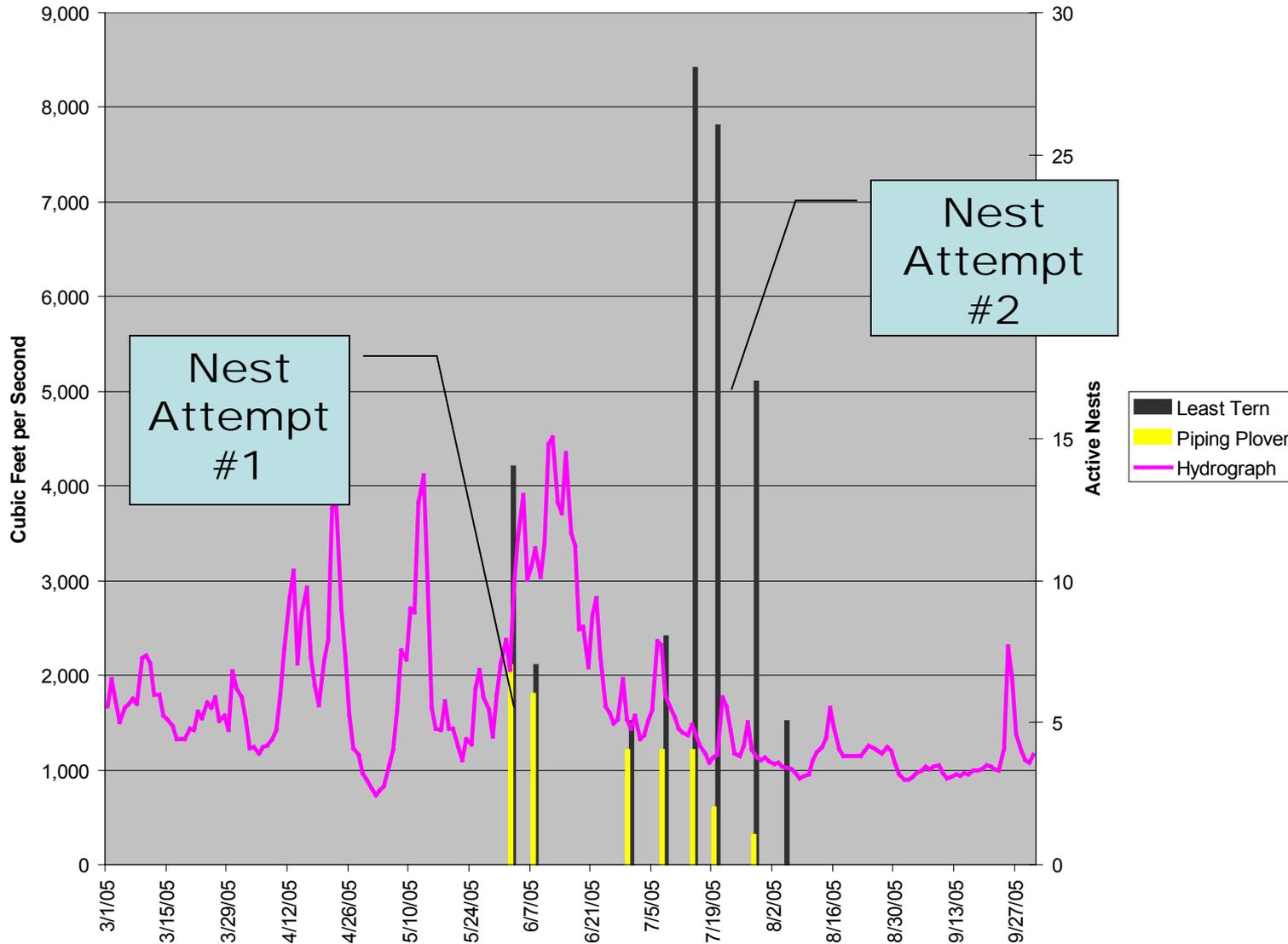
Nebraska: June, 2008 Monthly Observed Precipitation
Valid at 7/1/2008 1200 UTC- Created 7/1/08 22:44 UTC



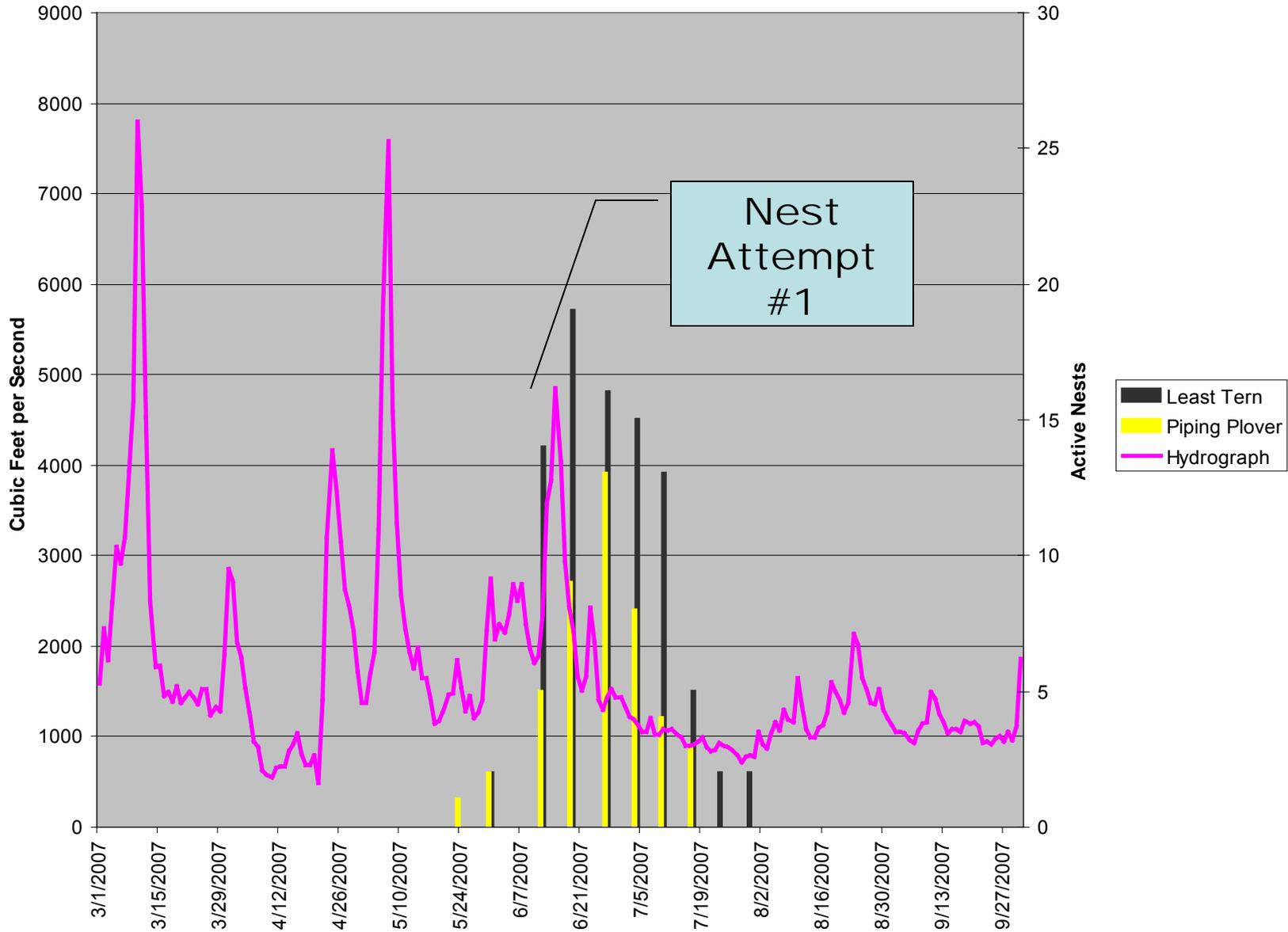
Gage Height Comparison



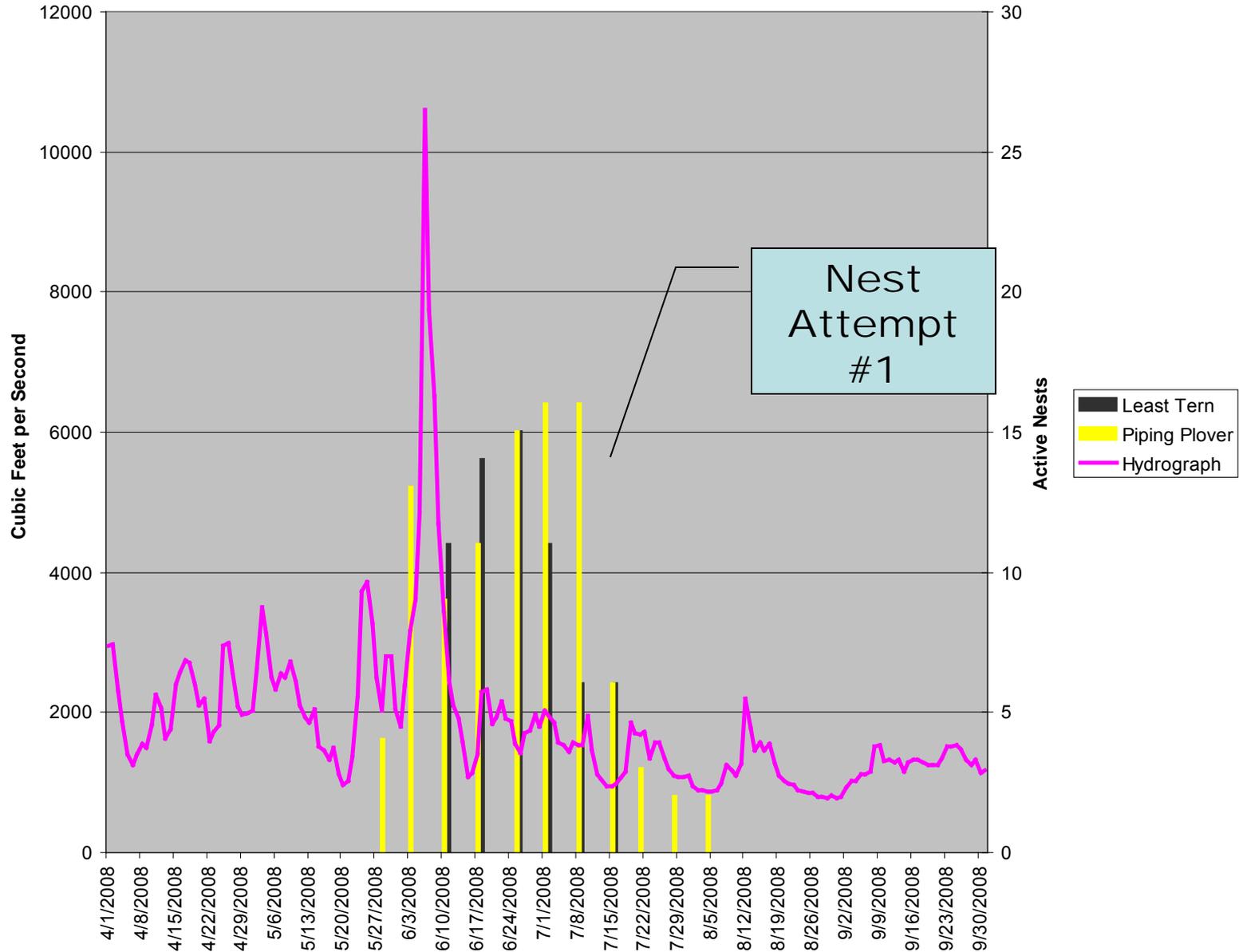
2005 Active Nest Timeline



2007 Active Nest Timeline



2008 Active Nest Timeline



2008 Expanded Weekly Monitoring

- RM 15 to RM 20 (Park Boundary)
 - 13 LT and 8 PP nests (2 primary colonies)
 - 17 PP and 5 LT fledged
- Will continue in 2009

2008 Wrap-Up

Significant Spring Rainfall
(pulse of nesting on descending limb)

+

Sandbars were built higher

+

Reduced summer precipitation

=

Increased least tern and piping plover productivity



Questions?

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From: [Wray, Matt, T NWO](#)
To: [Pillard, Matt](#)
Cc: [Hall, Meagan](#)
Subject: FW: Highway 12 Range of Alts extension request
Date: Wednesday, July 08, 2009 2:39:38 PM

Here is an e-mail from John Macy regarding this mornings conference call.

Matt

-----Original Message-----

From: John_Macy@nps.gov [mailto:John_Macy@nps.gov]
Sent: Wednesday, July 08, 2009 2:37 PM
To: Wray, Matt, T NWO
Subject: RE: Highway 12 Range of Alts extension request

Matt,

just a follow-up from our telephone conversation today.

We are requesting from the Corps:
EPA criteria the Corps used in their road culvert/bridge analysis NDOR
criteria for proposed sizes and locations of road culverts and bridges

NPS will provide:
estimated locations of roadway by survey data (i.e. 100+50) for hydrologic
connectivity research articles on ecological significance of hydrologic
connectivity

I'm trying to get electronic versions of these documents. If you can access
these electronically let me know.

Kondolf, G.M., A.J. Boulton, S. O'Daniel, C. Poole, F.J. Rahel, E.H.
Stanley, E. Wohl, A. Bang, J. Carlstrom, C. Cristoni, H. Huber, S.
Koljonen, P. Louhi and K. Nakaura. 2006. Process-based ecological river
restoration: visualizing three-dimensional connectivity and dynamic vectors
to recover lost linkages. *Ecology and Science* 11(2): 5.

Palmer, M.A., E.S. Bernhardt, J.D. Allan, P.S. Lake, G. Alexander, S.
Brooks, J. Carr, S. Clayton, C.N. Dahm, J. Follstad Shah, D.L. Galat, G.
Loss, P. Goodwin, D.D. Hart, B. Hassett, R. Jenkinson, G.M. Kondolf, R.
Lave, J.L. Meyer, T.K. O'Donnell, L. Pagano and E. Sudduth. 2005.
Standards for ecologically successful river restoration. *Jour. of Applied
Ecol.* 42: 208-217.

Thorp, J.H., M.C. Thoms and M.D. Delong. 2006. The riverine ecosystem
synthesis: biocomplexity in river networks across space and time. *River
Research and Applications* 22: 123-147.

Ward, J.V., K. Tockner, U. Uehlinger, amnd F. Malard. 2001. Understanding
natural patterns and processes in river corridors as the basis for effective
river restoration. *Regul. Rivers: Res. Mgmt* 17: 311-323.

Am I forgetting anything?

John M. Macy
Hydrologist
Niobrara National Scenic River
Missouri National Recreational River
605-214-3693

"A river has no politics." David E. Liliethal

Rayder Swanson
District #2

KNOX COUNTY BOARD OF SUPERVISORS
Knox County Courthouse
P.O. Box 166
Center, NE 68724-0166

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Martin J. O'Connor
District #1, Vice-Chairman

July 9, 2009

Matthew T. Wray
Dept. of Army
Corps of Engineers, Omaha District
8901 South 154th Street, STE 1
Omaha NE 68138-3621



RE: 2004-10258-WEH-N-12 Niobrara East & West Project

Dear Mr. Wray:

The Knox County Board of Supervisors reviewed your letter of June 30, 2009 regarding a request for information for an alternative analysis for the Nebraska Highway 12 (N-12) Project Environmental Impact Statement at their regular meeting held July 9, 2009. After a discussion, the following action was taken:

Motion by Supervisor Miller, seconded by Supervisor Fuchtman to reiterate to the Army Corps of Engineers that, as per adopted Resolution #2007-25, the Board recommends that moving portions of Highway 12 to the base of the bluffs or on top of the bluffs in the area of unstable soils is not recommended and is unacceptable with regard to the health, safety and welfare of Knox County residents and other drivers who will use Highway 12 in the future and additionally, the Knox County Board of Supervisors specifically approves and recommends that these portions of Highway 12 in question be moved and relocated according to the proposal which places Highway 12 directly adjacent to its present location and raised, as needed. By roll call vote. Ayes all Districts. Nays none. Motion carried.

A copy of Resolution #2007-25 is enclosed for your record.

If you have any questions, please contact the Knox County Clerk at 402-288-5604 or email clerk@knox.nacone.org

In behalf of the Knox
County Board of Supervisors,

Steven Banks
Chairman

Enclosure

*Knox County is an Equal Opportunity Employer**



RESOLUTION #2007 - 25

WHEREAS, the Nebraska Department of Roads must relocate Highway 12 east and west of Niobrara due to problems associated with sedimentation of the Missouri River causing water to accumulate on both sides of Highway 12 between Niobrara and Verdel and between Niobrara and the Santee junction, and

WHEREAS the U. S. Army Corps of Engineers, the U. S. Fish and Wildlife Service and the National Park Service have expertise in wetland mitigation and enhancement, and

WHEREAS the raised road could be built with material from this enhancement, and

WHEREAS, the wetlands along the stretch of highway in question are mostly a man-made wetlands which have been and continue to be manipulated by the U. S. Army Corps of Engineers, and

WHEREAS, one of the Nebraska Department of Roads' proposed relocation sites is through and across the rolling hills south and above the current stretch of Highway 12, and

WHEREAS, until 1965, Highway 12 was located in an area on the bluffs, similar to one of the proposed sites. Highway 12 was eventually moved to its present location because Pierre Shale and bentonite soils were prevalent and were subject to slides and unstable conditions, thus creating a substantial risk to the health and safety of citizens using that highway, and

WHEREAS, relocating the highway into the hills will disturb the Native American burial grounds and archeological sites that are in the hillsides south of the stretch of highway in question, and

WHEREAS, the slides on the hills will again become an unmanageable problem if relocated to this area, and

WHEREAS, the second proposed route, which would be located parallel to the base of the bluffs, will be prone to slides covering the road, endangering drivers and having a negative impact on wetlands in the area, and

WHEREAS, relocating the highway will take additional acres out of taxation in Knox County, and

WHEREAS, the current site of Highway 12 is a scenic road for many tourists who come to Knox County and relocating it will disturb the beauty of the area, and

WHEREAS, relinquishment of the current stretch of Highway 12 in question to Knox County if the road is relocated into the hills is a part of the proposal to move the highway, and

WHEREAS, Knox County does not have the financial, equipment or personnel resources to manage the proposed relinquished highway, and

WHEREAS, Knox County would require the current highway to be brought up to standards required for safe driving conditions by the Nebraska Department of Roads before accepting relinquishment of the current Highway 12.

THEREFORE NOW BE IT RESOLVED by the Knox County Board of Supervisors that relocating Highway 12 to either the base of the bluffs, or on top of the bluffs in the area of unstable soils is not recommended and is unacceptable with regard to the health, safety and welfare of Knox County residents and other drivers who will use Highway 12 in the future. Additionally, the Knox County Board of Supervisors specifically approves and recommends that Highway 12 be moved and relocated according to the proposal which places Highway 12 directly adjacent to its present location, and raised, as needed.

PASSED this 8th day of November 2007.

BOARD OF SUPERVISORS
KNOX COUNTY, NEBRASKA

Virgil H. Miller
Virgil H. Miller, Chairman, Dist. #3

Martin J. O'Connor
Martin J. O'Connor, Dist. #1

Rayder Swanson
Rayder Swanson, Dist. #2

Rick McManigal
Rick McManigal, Dist. #4

Norman MacKeprang
Norman MacKeprang, Dist. #5

Steven Banks
Steven Banks, Dist. #6

Jim Fuchtman
Jim Fuchtman, Dist. #7

ATTEST:

Joann M. Fischer
Joann M. Fischer, Knox County Clerk





United States Department of the Interior

NATIONAL PARK SERVICE
Missouri National Recreational River
P.O. Box 666
Yankton, South Dakota 57078

REPLY REFER TO:
D3219 (MNRR)



Mr. Mathew Wray
Regulatory Specialist
Department of the Army
Corps of Engineers, Omaha District
Nebraska Regulatory Office – Wehrspann
8901 South 154th St. Suite 1
Omaha, Nebraska 68128-3621
July 9, 2009

Dear Mr. Wray:

Thank you for the opportunity to comment on finalizing alternatives which will be carried forward and analyzed in the EIS for the Niobrara Highway 12 project (2004-10258-WEH). The proposed alternatives under recent discussion (conference call, July 8, 2009), consider construction parallel to the existing highway location (A3) and relocation to the base of the bluffs on the edge of the floodplain (A4).

Maximizing hydrologic connectivity between the stream and its floodplain will be the most beneficial for the aquatic ecosystem. 40 CFR 230.23 identifies the effects of discharge of fill to current patterns and water circulation which can cause “adverse changes in: Location, structure, and dynamics of aquatic communities: ...” 40 CFR 230.24 identifies effects of discharge of fill in modifying normal water fluctuations which “can alter or destroy communities and populations of aquatic animals...” Alternatives that maximize hydrologic connectivity will provide the most natural flow patterns and water circulation and will allow for the most normal flow fluctuation. The rising groundwater situation near the mouth of the Niobrara River is expected to continue as more sediment is delivered into the delta area of Lewis and Clark Lake. The area of open water grew in the floodplain transected by Highway 12 during the timeframe 1993 to 2008 (see attachments). It is expected that in the future there will be even greater expanses of open water in the floodplain area currently transected by Highway 12 and this trend should be taken into consideration to prevent further loss of hydrologic connectivity.

We suggest you consider alternatives that would maximize hydrologic connectivity (i.e., pried roadway) in the segments of a 'parallel' aligned and 'base-of-the-bluffs' highway as identified in the following table (locations are approximate):

Alternative A3	Alternative A4
600+00 to 715+00	615+00 to 700+00
64+82 to 131+00	70+00 to 85+00
160+00 to 253+53	174+00 to 253+53

Cost estimates for each segment should be documented in the proposed floodplain alternative.

We are also including the following research articles related to river ecology that further support our concern and request for alternatives that provide for greater connectivity:

Kondolf, G.M., A.J. Boulton, S. O'Daniel, C. Poole, F.J. Rahel, E.H. Stanley, E. Wohl, A. Bang, J. Carlstrom, C. Cristoni, H. Huber, S. Koljonen, P. Louhi and K. Nakaura. Process-based ecological river restoration: visualizing three-dimensional connectivity and dynamic vectors to recover lost linkages. *Ecology and Science* 11(2): 5.

Palmer, M.A., E.S. Bernhardt, J.D. Allan, P.S. Lake, G. Alexander, S. Brooks, J. Carr, S. Clayton, C.N. Dahm, J. Follstad Shah, D.L. Galat, G. Loss, P. Goodwin, D.D. Hart, B. Hassett, R. Jenkinson, G.M. Kondolf, R. Lave, J.L. Meyer, T.K. O'Donnell, L. Pagano and E. Sudduth. 2005. Standards for ecologically successful river restoration. *Jour. of Applied Ecol.* 42: 208-217.

Thorp, J.H., M.C. Thoms and M.D. Delong. 2006. The riverine ecosystem synthesis: biocomplexity in river networks across space and time. *River Res. Applic.* 22: 123-147.

Ward, J.V., K. Tockner, U. Uehlinger, and F. Malard. 2001. Understanding natural patterns and processes in river corridors as the basis for effective river restoration. *Regul. Rivers: Res. Mgmt* 17: 311-323.

We believe that a maximum hydrologic connectivity alternative will provide the decision-maker with information to compare and weigh environmental values and economic considerations. If you have any questions regarding our comments please feel free to contact John Macy at the Missouri National Recreational River at 605 665-0209.

Sincerely,



R. Michael Madell
Superintendent

Enclosures

160+00 to 253+53

1993



2008



N



0 0.1 0.2 Miles

64+82 to 131+00

1993



2008



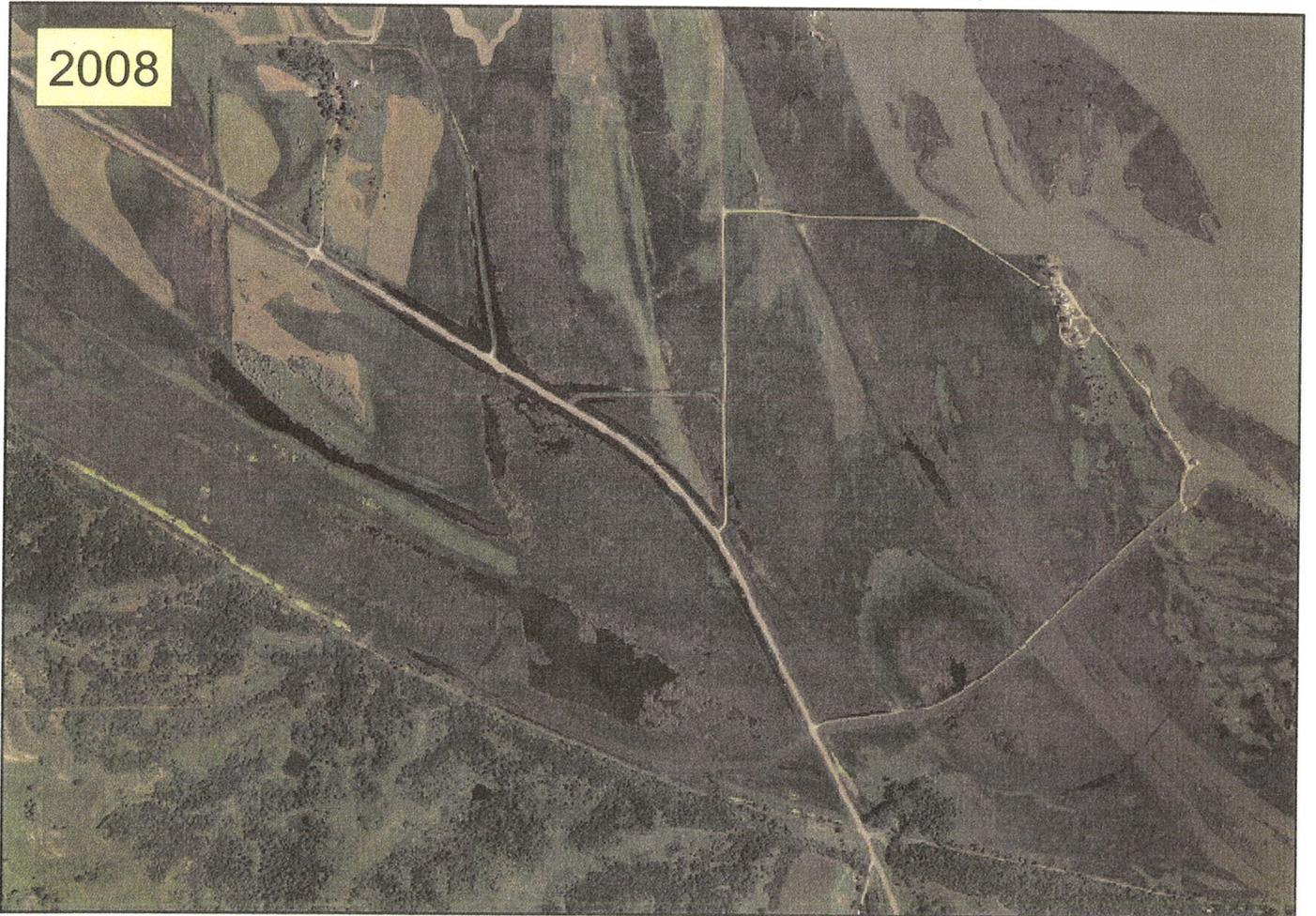
0.1 0.2 0.4 Miles

600+00 to 715+00

1993



2008



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THE RIVERINE ECOSYSTEM SYNTHESIS: BIOCOMPLEXITY IN RIVER NETWORKS ACROSS SPACE AND TIME

JAMES H. THORP^{a*}, MARTIN C. THOMS^b and MICHAEL D. DELONG^c

^a *Kansas Biological Survey and Department of Ecology and Evolutionary Biology, Higuchi Hall, University of Kansas, 2101 Constant Ave., Lawrence, KS 66047-3759, USA*

^b *Cooperative Research Centre for Freshwater Ecology, University of Canberra, Canberra, ACT 2601, Australia*

^c *Large River Studies Center and Department of Biology, Winona State University, Winona, MN 55987, USA*

ABSTRACT

We propose an integrated, heuristic model of lotic biocomplexity across spatiotemporal scales from headwaters to large rivers. This riverine ecosystem synthesis (RES) provides a framework for understanding both broad, often discontinuous patterns along longitudinal and lateral dimensions of river networks and local ecological patterns across various temporal and smaller spatial scales. Rather than posing a completely new model, we arrange a conceptual marriage of eco-geomorphology (ecological aspects of fluvial geomorphology) with a terrestrial landscape model describing hierarchical patch dynamics. We modify five components of this terrestrial model for lotic ecosystems: (1) nested, discontinuous hierarchies of patch mosaics; (2) ecosystem dynamics as a composite of intra- and inter-patch dynamics; (3) linked patterns and processes; (4) dominance of non-equilibrial and stochastic processes; and (5) formation of a quasi-equilibrial, metastable state. Our conceptual model blends our perspectives on biocomplexity with aspects of aquatic models proposed from 1980–2004.

Contrasting with a common view of rivers as continuous, longitudinal gradients in physical conditions, the RES portrays rivers as downstream arrays of large hydrogeomorphic patches (e.g. constricted, braided and floodplain channel areas) formed by catchment geomorphology and climate. The longitudinal distribution of these patches, which are identifiable using standard geomorphic techniques, varies amongst rivers and is difficult to forecast above ecoregional scales. Some types of hydrogeomorphic patches may reoccur along this downstream passage. Unique ecological 'functional process zones' are formed by individual types of hydrogeomorphic patches because of physiochemical habitat differences which affect ecosystem structure and function.

The RES currently includes 14 tenets predicting how patterns of individual species distributions, community regulation, lotic ecosystem processes, and floodplain interactions will vary over spatiotemporal scales, especially as they relate to the functional process zones formed by hydrogeomorphic differences in the river network. Copyright © 2006 John Wiley & Sons, Ltd.

KEY WORDS: eco-geomorphology; floodplains; flood pulse concept; headwaters; hierarchical patch dynamics; hydrogeomorphic patches; inshore retention concept; large rivers; river continuum concept; riverine productivity model

HISTORICAL PERSPECTIVES AND PHILOSOPHICAL FOUNDATION

Understanding the ecological structure and function of natural and/or altered lotic ecosystems is a common goal of many stream and river ecologists. This has spurred development of numerous conceptual models, shaped empirical research and funding, and occasionally altered government policies on river conservation, management and rehabilitation. Formation of conceptual theories can expand our knowledge of factors regulating river networks as long as popular theories are viewed as the 'latest best approximations' rather than iron-clad truths and if ecologists seek to test theories and comprehend why concordance or incongruity emerge.

A lucid and widely accepted understanding of how most ecosystems are naturally regulated has eluded terrestrial and aquatic ecologists. This challenge is especially rigorous in river networks because they are open systems whose physical structure changes dramatically over many spatial and temporal scales. Early attempts to cope with this complexity by dividing lotic ecosystems into specific, longitudinally ordered zones (e.g. Hawkes, 1975)

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Insight, part of a Special Feature on Restoring Riverine Landscapes
Process-Based Ecological River Restoration: Visualizing Three-Dimensional Connectivity and Dynamic Vectors to Recover Lost Linkages

G. Mathias Kondolf¹, Andrew J. Boulton², Scott O'Daniel³, Geoffrey C. Poole⁴, Frank J. Rahel⁵, Emily H. Stanley⁶, Ellen Wohl⁷, Asa Bång⁸, Julia Carlstrom⁹, Chiara Cristoni, Harald Huber¹⁰, Saija Koljonen¹¹, Pauliina Louhi¹², and Keigo Nakamura¹³

ABSTRACT. Human impacts to aquatic ecosystems often involve changes in hydrologic connectivity and flow regime. Drawing upon examples in the literature and from our experience, we developed conceptual models and used simple bivariate plots to visualize human impacts and restoration efforts in terms of connectivity and flow dynamics. Human-induced changes in longitudinal, lateral, and vertical connectivity are often accompanied by changes in flow dynamics, but in our experience restoration efforts to date have more often restored connectivity than flow dynamics. Restoration actions have included removing dams to restore fish passage, reconnecting flow through artificially cut-off side channels, setting back or breaching levees, and removing fine sediment deposits that block vertical exchange with the bed, thereby partially restoring hydrologic connectivity, i.e., longitudinal, lateral, or vertical. Restorations have less commonly affected flow dynamics, presumably because of the social and economic importance of water diversions or flood control. Thus, as illustrated in these bivariate plots, the trajectories of ecological restoration are rarely parallel with degradation trajectories because restoration is politically and economically easier along some axes more than others.

Key Words: *connectivity; flow dynamics; hyporheic zone; river restoration.*

INTRODUCTION

Connectivity is now widely acknowledged as a fundamental property of all ecosystems. The concept was introduced to ecology through landscape ecology as a factor explaining distribution of species (Merriam 1984, Moilanen and Nieminen 2002). However, definitions for this term vary widely and are often based either on metapopulation dynamics or continuity of landscape structure (Calabrese and Fagan 2004). In this paper, we concentrate on hydrologic connectivity (Ward 1989, Pringle 2003b) because it is arguably a defining feature of all riverine ecosystems. Pringle (2001:981) defined hydrologic connectivity as "water mediated transfer of matter, energy, and organisms within or between elements of the hydrologic cycle." Thus, in rivers, hydrologic connectivity refers to the water-mediated fluxes of material, energy, and organisms within and among components, e.g., the channel, flood plain, alluvial aquifer, etc., of the ecosystem. This hydrologic

connectivity can be viewed as operating in longitudinal, lateral, and vertical dimensions and over time (Ward 1989).

The temporal dimension of connectivity is crucial. Temporal changes in connectivity underpin most river ecosystem processes, but were not incorporated within early static models of riverine ecosystems, e.g., the river continuum concept (Vannote et al. 1980), in which the roles of disturbance or flow regime were underestimated. More importantly, in river restoration, the recovery of lost linkages or disconnections is intended to occur over time, so the target endpoint is also likely to be temporally dynamic (Palmer et al. 2005). Therefore, to describe anthropogenic impacts and subsequent responses to restoration in rivers, visualizing changes in three-dimensional connectivity over time is useful.

In this paper, we focus on the relationship between hydrologic connectivity and flow variability, i.e.,

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Standards for ecologically successful river restoration

M.A. PALMER,* E.S. BERNHARDT,* J. D. ALLAN,† P.S. LAKE,‡
G. ALEXANDER,† S. BROOKS,‡ J. CARR,§ S. CLAYTON,¶ C. N. DAHM,**
J. FOLLSTAD SHAH,** D. L. GALAT,†† S. G. LOSS,‡‡ P. GOODWIN,¶
D.D. HART,§ B. HASSETT,* R. JENKINSON,§§ G.M. KONDOLF,¶¶
R. LAVE,¶¶ J.L. MEYER,*** T.K. O'DONNELL,†† L. PAGANO¶¶ and
E. SUDDUTH***

*Department of Entomology, University of Maryland, USA and Department of Biology, Duke University, USA;

†School of Natural Resources, University of Michigan, USA; ‡Department of Biological Sciences, Monash University, Australia; §Patrick Center for Environmental Research, Academy of Natural Sciences, USA;

¶Ecohydraulics Research Group, University of Idaho, USA; **Department of Biology, University of New Mexico, USA; ††US Geological Survey, Cooperative Research Units, Department of Fisheries & Wildlife Sciences, University of Missouri, USA; ‡‡Grand Canyon Monitoring and Research Center, USA; §§Department of Fish and Wildlife Resources, University of Idaho, USA; ¶¶Department of Landscape Architecture and Environmental Planning, University California, USA; and ***Institute of Ecology, University of Georgia, USA

Summary

1. Increasingly, river managers are turning from hard engineering solutions to ecologically based restoration activities in order to improve degraded waterways. River restoration projects aim to maintain or increase ecosystem goods and services while protecting downstream and coastal ecosystems. There is growing interest in applying river restoration techniques to solve environmental problems, yet little agreement exists on what constitutes a successful river restoration effort.

2. We propose five criteria for measuring success, with emphasis on an ecological perspective. First, the design of an ecological river restoration project should be based on a specified guiding image of a more dynamic, healthy river that could exist at the site. Secondly, the river's ecological condition must be measurably improved. Thirdly, the river system must be more self-sustaining and resilient to external perturbations so that only minimal follow-up maintenance is needed. Fourthly, during the construction phase, no lasting harm should be inflicted on the ecosystem. Fifthly, both pre- and post-assessment must be completed and data made publicly available.

3. Determining if these five criteria have been met for a particular project requires development of an assessment protocol. We suggest standards of evaluation for each of the five criteria and provide examples of suitable indicators.

4. *Synthesis and applications.* Billions of dollars are currently spent restoring streams and rivers, yet to date there are no agreed upon standards for what constitutes ecologically beneficial stream and river restoration. We propose five criteria that must be met for a river restoration project to be considered ecologically successful. It is critical that the broad restoration community, including funding agencies, practitioners and citizen restoration groups, adopt criteria for defining and assessing ecological success in restoration. Standards are needed because progress in the science and practice of river restoration has been hampered by the lack of agreed upon criteria for judging ecological success. Without well-accepted criteria that are ultimately supported by funding and implementing agencies, there is little incentive for practitioners to assess and report restoration outcomes. Improving methods and weighing the ecological benefits of various restoration approaches require organized national-level reporting systems.

UNDERSTANDING NATURAL PATTERNS AND PROCESSES IN RIVER CORRIDORS AS THE BASIS FOR EFFECTIVE RIVER RESTORATION

J.V. WARD^{a,*}, K. TOCKNER^a, U. UEHLINGER^a AND F. MALARD^b

^a Department of Limnology, EAWAG/ETH, Ueberlandstrasse 133, CH-8600 Duebendorf, Switzerland

^b Hydrobiologie et Ecologie Souterraines, Universite Lyon 1, 43 Bd du 11 Novembre 1918, F-69622 Villeurbanne Cedex, France

ABSTRACT

Running water ecology is a young science, the conceptual foundations of which were derived largely from research conducted in Europe and North America. However, virtually all European river corridors were substantially regulated well before the science of river ecology developed. While regulation of North American river systems occurred later than in European systems, river ecology also developed later. Therefore, there is a general impression of rivers as being much less heterogeneous and much more stable than they actually are in the natural state. The thesis of this paper is that established research and management concepts may fail to fully recognize the crucial roles of habitat heterogeneity and fluvial dynamics owing to a lack of fundamental knowledge of the structural and functional features of morphologically intact river corridors. Until quite recently, most concepts in river ecology were based on the implicit assumption that rivers are stable, single-thread channels isolated from adjacent floodplains. Unfortunately, many rivers are in just such a state, but it should be recognized that this is not the natural condition. This incomplete understanding constrains scientific advances in river ecology and renders management and restoration initiatives less effective. Examples are given of the high level of spatio-temporal heterogeneity that may be attained in rivers where natural processes still operate on a large scale. The objective of this paper is to promulgate a broader and more integrative understanding of natural processes in river corridors as a necessary prelude to effective river conservation and management. Copyright © 2001 John Wiley & Sons, Ltd.

KEY WORDS: connectivity; disturbance; floodplains; landscape ecology; river corridors; river restoration; succession

INTRODUCTION

Although river corridors constitute one of our most valuable natural resources and contain a disproportionately high amount of the total biodiversity of a given region (Naiman *et al.*, 1993; Tockner and Ward, 1999), they have been subjected to severe human-induced changes (Petts, 1990). In much of the world, river corridors were substantially altered well before running water ecology developed as a distinct discipline. In fact, the conceptual foundations of stream/river ecology were derived largely from studies conducted in regions where river corridors had already been regulated for many decades (North America) or even centuries (Europe). This is especially true for floodplain segments in lower reaches, where river corridors formerly characterized by dynamic interactions and complex environmental gradients between lotic, lentic, riparian and groundwater systems have been regulated to suppress fluvial dynamics, and trained to form straightened, artificially constrained single thread channels (Ward and Stanford, 1995a). The thesis of this paper is that an incomplete appreciation of the complex nature of ecological patterns and processes in natural river ecosystems, including the critical role of natural disturbance, has constrained both theoretical advances in the discipline and the effectiveness of river conservation and restoration initiatives.

Because of their high resilience, their interactive nature and their connectivity with other landscape units, river corridors may serve as effective foci for nature conservation and restoration. However, we

* Correspondence to: Department of Limnology, EAWAG/ETH, Ueberlandstrasse 133, CH-8600 Duebendorf, Switzerland. E-mail: jvward@eawag.ch

Received 15 October 2000

Revised 17 January 2001

Accepted 28 February 2001

From: [Pillard, Matt](#)
To: [Hall, Meagan](#)
Subject: FW: follow-up to Hwy 12 conference call
Date: Tuesday, July 28, 2009 6:50:43 AM

Here is what Carey sent

From: Grell, Carey [carey.grell@nebraska.gov]
Sent: Friday, July 24, 2009 8:19 AM
To: Wray, Matt, T NWO; Pillard, Matt
Cc: robert_harms@fws.gov; Hickman, Terry; Jennings, Sue; John_Macy@nps.gov; Latka, Rebecca J NWO; Eliodora Chamberlain; Gorton, Dick
Subject: follow-up to Hwy 12 conference call

On the conference call yesterday, I referenced some guidelines developed by the Arizona Fish and Game Department regarding spacing of culverts for reptile and amphibian passage, that could be used in conjunction with the EPA criteria used for culvert sizing. That information came from a document titled "Guidelines for Culvert Construction to Accommodate Fish and Wildlife Movement and Passage" prepared by the Arizona Game and Fish Department, Habitat Branch, November 2006. The document can be found on the web at <http://www.azgfd.gov/hgis/guidelines.aspx> and then by clicking on the link to culvert guidelines for wildlife passage.

The guidance suggests culvert spacing of 150-300 feet. At a minimum, it is our suggestion that this spacing for wildlife passage be evaluated for the existing floodplain alternatives where open water or semi-permanent wetlands are present as identified on the maps provided, and in areas that may be expected to get wetter over the life of the project due to rising water levels in the area. I wanted to add that we suggest that some type of fencing between culvert openings, at least along open water areas, to funnel animals towards the culvert crossings be considered in the evaluation, as well as the incorporation of shelving within culverts at certain locations to provide for the passage of terrestrial species.

Carey Grell
Environmental Analyst
Realty and Environmental Services Division
Nebraska Game and Parks Commission
Lincoln, Nebraska
402.471.5423



United States Department of the Interior

NATIONAL PARK SERVICE
Missouri National Recreational River
P.O. Box 666
Yankton, South Dakota 57078

REPLY REFER TO:
D3219 (MNRR)

RECEIVED
SEP 8 2009
BY: _____

Mr. Mathew Wray
Regulatory Specialist
Department of the Army
Corps of Engineers, Omaha District
Nebraska Regulatory Office – Wehrspann
8901 South 154th St. Suite 1
Omaha, Nebraska 68128-3621
August 26, 2009

Dear Mr. Wray:

Thank you for the opportunity to comment on finalizing alternatives which will be carried forward for analysis in the EIS for the Niobrara Highway 12 project (2004-10258-WEH). Our meeting at Ponca State Park on August 17, 2009, concerned options to maximize hydrologic connectivity between the river and the floodplain for Alternatives A-3 (parallel alignment) and A-4 (base-of-bluff alignment).

A growing number of scientists are now finding that large lateral, flow-related patches in large rivers are responsible for major differences in structural and functional attributes of river ecosystems for plankton, benthic macroinvertebrates, nutrient cycling, productivity and food webs. Often these large patches were created, eliminated, or altered extensively on seasonal or aperiodic temporal scales by sub-bankful flow pulses or supra-bankful flood pulses. The flood/flow pulse concept identifies that flow variability creates a “shifting littoral” at the terrestrial-aquatic interface that facilitates the exchanges of water, sediment and biota between channel and floodplain. These exchanges further enhance the biodiversity of floodplain systems for both aquatic and terrestrial species. Maximum hydrologic connectivity between the stream and its floodplain, for normal water fluctuation, circulation and current patterns, will be the most beneficial for the riverine ecosystem.

We previously suggested alternatives that would maximize hydrologic connectivity, through use of an elevated roadway, in the segments identified in Table 1 for Alternatives A-3 and A-4.

Table 1: Locations to Maximize Hydrologic Connectivity

Alternative A-3	Alternative A-4
600+00 to 715+00	615+00 to 700+00
64+82 to 131+00	70+00 to 85+00
160+00 to 253+53	174+00 to 253+53

After consideration of the discussion at our recent meeting regarding cost estimates for the proposed maximum hydrologic connectivity, we have modified our proposal as identified in Table 2.

Table 2: Modified Locations for Hydrologic Connectivity

Alternative A-3	Alternative A-4
640+00 to 715+00	660+00 to 700+00
74+50 to 131+00	
170+00 to 253+53	174+00 to 253+53

We still believe that a maximum hydrologic connectivity alternative will provide the public and the decision-maker with information to compare and weigh environmental values and economic considerations. The modified proposal provides a lower level of lateral connectivity and will likewise have reduced biodiversity compared to the earlier proposal.

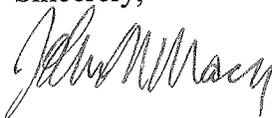
The NPS previously identified that it has a concern over post-construction wetland fill associated with the existing Highway 12. We appreciate the follow-up correspondence identifying the locations where Nebraska Department of Roads (NDOR) considers leaving the existing highway wetland fill (minus the surface asphalt layer) as a “wave berm”. There is substantial wetland fill from proposed new construction for Alternatives A-3 and A-4 (Table 3). Preliminary engineering drawings show placement of riprap on the remnant Highway 12 “wave berm”. We suggest that any necessary riprap placement be incorporated into the new construction design for erosion protection and that the old highway be removed entirely to reduce overall wetland impacts. For portions of elevated roadway there would be no need for a “wave berm”. Table 3 identifies estimated impacts to wetlands and length of lateral hydrologic connectivity for Alternatives A-3, A-4 and the elevated and modified elevated roadway. In Table 3, HDR Engineering estimated wetland impacts for the parallel and base-of-bluff values and NPS estimated the other values from aerial photographs with NDOR structure survey locations and the NDOR table listing structure sizes.

Table 3 Estimated Wetland Impacts and Lateral Hydrologic Connectivity, Alternatives A-3, A-4 and Elevated Roadway.

	WETLAND IMPACTS (acres)		LENGTH OF LATERAL CONNECTIVITY (feet)	
	New Construction	Remaining Hwy 12	West Segment	East Segment
Alternative A-3				
Parallel	88	32	231	233
Elevated	16	9	11,500	15,970
Modified Elevated	25	13	7,500	14,970
Alternative A-4				
Base-of-Bluff	68	3	18,000	17,800
Elevated	11	3	18,000	17,800
Modified Elevated	16	3	18,000	17,800

If you have any questions regarding our comments please feel free to contact John Macy, (605) 665-0209, at the Missouri National Recreational River. We appreciate the opportunity to work with you on this project.

Sincerely,



for
R. Michael Madell
Superintendent



United States Department of the Interior

NATIONAL PARK SERVICE
Missouri National Recreational River
P.O. Box 666
Yankton, South Dakota 57078

REPLY REFER TO:

N12(MNRR)

October 19, 2009

Ms. Rebecca J. Latka
Corps of Engineers
Omaha District
1616 Capitol
Omaha, Nebraska 68102

Dear Ms. Latka:

Thank you for your letter of September 30, 2009 regarding alternatives for improvements to Nebraska Highway 12. We agree that the project scope and existing natural conditions are unique, but believe those conditions extend beyond flood damage and frequent maintenance. Much of the project area is within the boundary of the Missouri National Recreational River. The existing alignment, as well as several of the alternatives currently under consideration parallel the river, which is both a unit of the National Park system and the National Wild and Scenic River system. The protected status of the river corridor must also be given paramount consideration as this environmental analysis continues. We therefore concur with your decision to continue to develop alternative A3 as part of the analysis.

We trust that all alternatives will be given equal treatment throughout the process. Based on our preliminary evaluation, we believe that alternative A3 will most likely be the environmentally preferred alternative as required by 40 CFR 1505.2.

Please contact me at 605-214-3389 if you have additional questions about this matter.

Sincerely,

/s/

R. Michael Madell



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Nebraska Field Office
203 West Second Street
Grand Island, Nebraska 68801

November 18, 2009

FWS-NE: 2009-198

Ms. Rebecca J. Latka
U.S. Army Corps of Engineers
Regulatory Branch
1616 Capitol
Omaha, NE 68102-9000

**RE: Nebraska Highway 12, Niobrara East and West Project, Knox County,
Nebraska**

Dear Ms. Latka:

This responds to your October 1, 2009, request for comments and concurrence from the U.S. Fish and Wildlife Service (Service) regarding the proposed N-12 Niobrara East and West Highway construction project. This letter provides updates to the species list as requested in your October 1 letter. The Service has responsibility for conservation and management of fish and wildlife resources for the benefit of the American public under the following authorities: 1) Endangered Species Act of 1973 (ESA), 2) Fish and Wildlife Coordination Act (FWCA), 3) Bald and Golden Eagle Protection Act (Eagle Act), and 4) Migratory Bird Treaty Act (MBTA). The National Environmental Policy Act (NEPA) requires compliance with all of these statutes and regulations. The project proponent and lead federal agency are responsible for compliance with these federal laws.

The Service has special concerns for endangered and threatened species, migratory birds, and other fish and wildlife and their habitats. Habitats frequently used by fish and wildlife species are wetlands, streams, riparian (streamside) woodlands, and grasslands. Special attention is given to proposed projects that include modification of wetlands, stream alteration, loss of riparian habitat, or contamination of habitats. When this occurs, the Service recommends ways to avoid, minimize, or compensate for adverse affects to fish and wildlife and their habitats.

ENDANGERED SPECIES ACT

Pursuant to section 7 of ESA, every federal agency, in consultation or conference with the Service, is required to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any federally listed or proposed species and/or result in

the destruction or adverse modification of designated and/or proposed critical habitat. In accordance with section 7(a)(2) of ESA, the federal agency should determine if any federally listed threatened or endangered species and/or designated/proposed critical habitat would be directly and/or indirectly affected by the proposed project. The assessment of potential impacts (direct and indirect) must include an “affect” or “no affect” determination and be presented to the Service in writing. If the Service agrees with the determination made by the federal agency, this office would provide a letter of concurrence. If federally listed species and/or designated/proposed critical habitat would be adversely affected by this action, the federal agency will need to formally request further section 7 consultation with the Service prior to making any irretrievable or irreversible commitment of federal funds (section 7(d) of ESA), or issuing any federal permits or licenses.

In accordance with section 7 of ESA, the Service has determined that the following federally listed and proposed species may occur in the proposed project area or be affected by the proposed highway construction project.

<u>Listed Species</u>	<u>Expected Occurrence</u>
Interior least tern (<i>Sternulla antillarum</i>)	Migration, nesting
Piping plover (<i>Charadrius melodus</i>)	Migration, nesting
Pallid sturgeon (<i>Scaphirhynchus albus</i>)	Missouri River and Niobrara River
American burying beetle (<i>Nicrophorus americanus</i>)	Nebraska Loess hills, mesic, tall-grass prairie and wet meadows

Least Tern and Piping Plover

The least tern, federally listed as endangered, and the piping plover, federally listed as threatened, nest on unvegetated or sparsely vegetated sandbars in river channels. The nesting season for the least tern and piping plover is from April 15 through September 1. Least terns feed on small fish in the river and piping plovers forage for invertebrates on exposed beach substrates. Least terns and piping plovers nest on the Niobrara and Missouri rivers in the vicinity of the proposed project area. The Service does not just consider potential impacts to the species or the habitats themselves, but the project affect to hydrological, sediment and nutrient processes that affect their biological integrity. The proposed project could also contribute to cumulative floodplain, tributary and watershed-level impacts. Disconnection of the river from its floodplain could result in a modification to its floodpulse as influenced by flows contributed by the nearby Niobrara River. Sedell et al (1989) stated that the rate at which water moves onto or off the floodplain helps determine the type and extent of the nutrient cycling regime (anaerobic to aerobic). Additionally, 40 CFR 230.24 identifies effects of discharge of fill in modifying normal water fluctuations which “can alter or destroy communities and populations of aquatic animals”. Specifically, fill associated with the road grade has the potential to act as a levee. This can result in modifications to the flood pulse and thus, hydrology, flow patterns, nutrient/sediment cycling and other riverine processes essential for the production of forage resources for the least tern and piping plover.

Pallid Sturgeon

The pallid sturgeon, federally listed as endangered, is known to occur in the Missouri and lower Platte rivers in Nebraska. The pallid sturgeon also has been found on the Niobrara River in an area approximately 5 miles upstream from its Missouri River confluence. Floodplains, backwaters, chutes, sloughs, islands, sandbars, and main channel waters formed the large-river ecosystem that provided macrohabitat requirements for the pallid sturgeon, a species that is associated with diverse aquatic habitats. These habitats historically were dynamic and in a constant state of change due to influences from the natural hydrograph, and sediment and runoff inputs from an enormous watershed spanning portions of ten States and a small portion of Canada. Navigation, channelization and bank stabilization, and hydropower generation projects have caused the widespread loss of this diverse array of dynamic habitats once provided to pallid sturgeon on the Missouri River, resulting in a precipitous decline in populations of the species. The proposed highway construction project may alter nutrient and sediment cycling in similar manner as that described above for the least tern and piping plover. Junk et al. (1989), describes aquatic/terrestrial transition zones, also known as floodplains, where interactions between lotic and lentic aquatic systems occur. He goes on to explain that in the "river-floodplain systems", a floodpulse prevents permanent stagnation, allowing for rapid recycling of organic matter and nutrients resulting in higher primary and secondary productivity than permanent aquatic or terrestrial habitats. We are concerned about impacts that may occur to these processes as a result of floodplain disconnectivity brought on by the proposed highway construction project.

American burying beetle

The federally endangered American burying beetle, the largest member of the carrion beetle family, is remarkably adept at locating and feeding on carrion. Carrion provides not only a food source, but also is an essential component in a complex reproductive cycle for the species which includes parental care of young. In Nebraska, the American burying beetle has been observed from April 1 to October 29, with peak periods of activity extending from June through August. Beetles overwinter as adults. Because of their habit of feeding on carrion, their sole food source, the species likely forages on roadkills found along Nebraska roadways. The species has been found in mesic habitats such as wet meadows, streams, and wetlands in association with relatively undisturbed semi-arid, sandhill and loam grasslands. Such areas have been observed to have a thick stand of grassland vegetation with some woody vegetation. Soils composed of some clay with a prominent duff (litter) layer have also been observed at these sites. In Nebraska, American burying beetle populations are known to occur in Antelope, Blaine, Boone, Brown, Cherry, Custer, Dawson, Frontier, Gosper, Holt, Keya Paha, Lincoln, Loup, Rock, Thomas, and Wheeler Counties. The proposed highway construction project may adversely affect the American burying beetle if construction activities occur in the bluff areas found along the river floodplain. It is recommended that a survey be conducted for the species in such areas if suitable habitat is available.

Affect/No Affect Determination

The Service recommends that the Corps consider the information provided above with regards to making its assessment of potential impacts of the proposed road construction project on the American burying beetle, least tern, piping plover, and pallid sturgeon and in making the “affect/no affect” determination. Further, the Service recommends that the Corps not limit its consideration of affect to just the above project information, but other potential affects as they become apparent during the course of other project studies and/or project development and modification.

All federally listed species under ESA are also State-listed under the Nebraska Nongame and Endangered Species Conservation Act. However, there are also State-listed species that are not federally listed. To determine if the proposed project may affect State-listed species, the Service recommends that the project proponent contact Michelle Koch, Nebraska Game and Parks Commission, 2200 N. 33rd Street, Lincoln, NE 68503-0370

REVIEW, COMMENTS, AND RECOMMENDATIONS ON THE PROPOSED PROJECT ACTION UNDER OTHER FISH AND WILDLIFE STATUTES

Fish and Wildlife Coordination Act

1. Water Resources

The FWCA requires consultation with the Service and State fish and wildlife agency for the purpose of giving equal consideration to fish and wildlife resources in the planning, implementation, and operation of federal and federally funded, permitted, or licensed water resource development projects. The FWCA requires that federal agencies take into consideration the effect that water related projects may have on fish and wildlife resources, to take action to avoid impact to these resources, and to provide for the enhancement of these resources. As mentioned above, impediments to nutrient and sediment cycling due to the highway construction project represents a substantial impediment to nutrient and sediment cycling essential for riverine fish and wildlife species to meet life requisites.

2. Wetlands, Streams, and Riparian Habitats

Wetlands and streams will be impacted by this proposed project and as such, a Department of the Army permit from the U.S. Corps of Engineers will be needed. The Service will provide FWCA comments pursuant to a permit application. The Service recommends that impacts to wetlands, streams, and riparian areas be avoided or minimized, in accordance with the Section 404(B)(1) Guidelines of the Clean Water Act. For projects that do not require access or proximity to, or location within aquatic environments (i.e., non-water dependant project) to fulfill its basic project purpose, it is assumed that practicable alternatives exist that would cause less damage to aquatic resources than projects that are located in aquatic ecosystems. In addition to determining the least environmentally damaging practicable alternative, 40 CFR Part 230.10(a) of the Guidelines also states, ... no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.”

If after an alternatives analysis has been completed in accordance with the Guidelines, and unavoidable impacts are to occur to aquatic habitats, the Service recommends that compensation (i.e., restoration of a degraded wetland or creation) occur.

3. Animal Passage and Aquatic Biota

The proposed highway project has the potential to be an impediment to passage of wildlife if it is constructed in the river floodplain. The Service is aware that a number of wildlife species are killed on the Highway 12 every year as a result of collisions with automobiles. Detailed surveys able to accurately depict an estimated number of wildlife killed every year have not been conducted. However, available surveys have shown routine use of Highway 12 and subsequent automobile collisions occurring with wildlife in the area. Culverts should be constructed at elevations so as to not impede animal/fish movement (i.e. either new culvert installation or culverts used in a temporary crossing). Other methods to avoid impacts to wildlife and automobile collisions should also be considered. We have also enclosed recommended best management practices to minimize potential impacts to native fish and other aquatic resources, including spawning timeframes for Nebraska fish species.

To determine if the proposed project may affect fish and wildlife resources of the State of Nebraska under the FWCA, the Service recommends that the project proponent contact Carey Grell, Nebraska Game and Parks Commission, 2200 N. 33rd Street, Lincoln, NE 68503-0370.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*). The golden eagle is found in arid, open country with grassland for foraging in western Nebraska and usually near buttes or canyons which serve as nesting sites. Golden eagles are often a permanent resident in the Pine Ridge area of Nebraska. Bald eagles utilize mature, forested riparian areas near rivers, streams, lakes, and wetlands and occur along all the major river systems in Nebraska. The bald eagle southward migration begins as early as October and the wintering period extends from December-March. Additionally, many eagles nest in Nebraska from mid-February through mid-July. Disturbances within 0.5-mile of an active nest or within line-of-sight of the nest could cause adult eagles to discontinue nest building or to abandon eggs. Both bald and golden eagles frequent river systems in Nebraska during the winter where open water and forested corridors provide feeding, perching, and roosting habitats, respectively. The frequency and duration of eagle use of these habitats in the winter depends upon ice and weather conditions. Human disturbances and loss of wintering habitat can cause undue stress leading to cessation of feeding and failure to meet winter thermoregulatory requirements. These affects can reduce the carrying capacity of preferred wintering habitat and reproductive success for the species. To comply with the Eagle Act, it is recommended that the project proponent determine whether the proposed project would impact bald or golden eagles. If it is determined that either species could be affected by the proposed project, the Service recommends that the project proponent notify this office as well as the Nebraska Game and Parks Commission for recommendations to avoid adverse impacts to bald and golden eagles.

Migratory Bird Treaty Act

Under the Migratory Bird Treaty Act, construction activities in grassland, wetland, stream, and woodland habitats, and those that occur on bridges (e.g., which may affect swallow nests on bridge girders) that would otherwise result in the taking of migratory birds, eggs, young, and/or active nests should be avoided. Although the provisions of MBTA are applicable year-round, most migratory bird nesting activity in Nebraska occurs during the period of April 1 to July 15. However, some migratory birds are known to nest outside of the aforementioned primary nesting season period. For example, raptors can be expected to nest in woodland habitats during February 1 through July 15, whereas sedge wrens which occur in some wetland habitats normally nest from July 15 to September 10. The Service recommends that construction activities be scheduled to avoid the primary nesting period. If it is determined that federally listed migratory birds may be affected, please refer to the ESA section of this letter.

Wild and Scenic Rivers Act

As you know, the proposed project is located within a segment of the Missouri River designated as the 59-mile District of the Missouri National Recreational River (MNRR), a component of the Wild and Scenic Rivers System. Section 7(a) of the Wild and Scenic Rivers Act prohibits the authorization of water resources projects that would have a "direct and adverse effect" on the values for which the MNRR was established. The National Park Service, as the administrative authority for the MNRR, identified natural, cultural, and recreational outstandingly remarkable values, in addition to preservation of the free-flowing condition as critically important characteristics to the MNRR. The Service encourages the Corps to continue to work closely with the National Park Service on this proposed project.

The Service appreciates the opportunity to review and comment on the subject project. Should you have questions regarding these comments, please contact Mr. Matt Rabbe within our office at matt_rabbe@fws.gov or (308)382-6468, extension 25.

Sincerely,


for Ann L. Carlson
Acting Field Supervisor

cc: NGPC; Lincoln, NE (Attn: Michelle Koch)
NGPC; Lincoln, NE (Attn: Carey Grell)
NPS; Yankton, NE (Attn: John Macy)

References

- Junk, W.J., P.B. Bayley, and R.E. Sparks. 1989. The flood pulse concept in river-floodplain systems, p. 110-127. In D.P. Dodge [ed.] Proceedings of the International Large River Symposium. Can. Spec. Publ. Fish. Aquat. Sci. 106.
- Sedell, J.R., J.E. Richey, and F.J. Swanson. 1989. The river continuum concept: A basis for the expected ecosystem behavior of very large rivers?, p. 49-55. In D.P. Dodge [ed.] Proceedings of the International Large River Symposium. Can. Spec. Publ. Fish. Aquat. Sci. 106.

ENCLOSURE

Recommended Best Management Practices for Proposed Construction Activities Associated with Streams/Rivers

- Avoid earth moving activities or fill/bank armoring during native fish spawning periods from May 15 – July 31, construct stream crossings or other associated temporary embankments during low flow periods (usually August – October).
- Minimize work area at stream locations. The majority of the work (including heavy equipment and storage sites) should occur above the high bank line. Avoid driving equipment through the streambed.
- Implement comprehensive and effective erosion and sediment controls. These methods should be implemented and maintained for the duration of the project and considered at all stages of the project planning and design. Close attention is warranted for the placement and maintenance of temporary erosion control measures at the construction site to minimize sediment loading. These erosion/sediment control techniques should keep sediments from entering the stream and remain in place until work areas become re-vegetated and stable. Such erosion control measures may include properly placed sediment/silt screens or curtains and hay bales. Proper techniques are important to the placement of these types of structures and include trenching, staking and backfilling as well as using the appropriate number of bales. These techniques are best used in combination with each other rather than separately.
- Erosion and sediment controls should be monitored daily during construction to ensure effectiveness, particularly after storm events, and only the most effective techniques should be utilized. Clean, repair and replace structures as necessary.
- Exposed stream banks must be stabilized immediately after construction activity. Eroded surfaces should not be left exposed for greater than one day. If rain is predicted, no construction should commence unless eroded surfaces are immediately treated with geotextile fabric, mulch, seeding or some techniques that would stabilize the bank or exposed areas from eroding.
- Erosion repair and stream bank restoration should use appropriate bioengineering solutions.
- Develop and implement a hazardous materials safety protocol. This would include that all temporary storage facilities for petroleum products, other fuels and chemicals must be located and protected to prevent accidental spills from entering streams within the project area.

FISRWG. 1998. Stream Corridor Restoration: Principles, Processes, and Practices. By the Federal Interagency Stream Restoration Working Group (FISRWG) (15 Federal agencies of the U. S. Government). GPO item No. 0120-A; SuDocs No. A 57.6/2:EN 3/PT.653. ISBN-0-934213-59-3.



Nebraska Game and Parks Commission

2200 N. 33rd St. / P.O. Box 30370 / Lincoln, NE 68503-0370

Phone: 402-471-0641/ Fax: 402-471-5528 / www.OutdoorNebraska.org

January 15, 2010

Rebeca J. Latka
Department of the Army
Corps of Engineers, Omaha District
1616 Capitol
Omaha, NE 68102

Re: Request for concurrence on species list for Project: Nebraska Highway 12 Niobrara East and West

Dear Ms. Latka,

Please make reference to your letter regarding a concurrence with a list of state listed species for a project area in Knox County. The Nebraska Game and Parks Commission has responsibility for protecting threatened and endangered species under authority of the Nongame and Endangered Species Conservation Act (Neb. Rev. Stat. § 37-801-11) and we offer the following comments.

The species list you sent in your letter included the following species:

American burying beetle (*Nicrophorus americanus*)
Interior least tern (*Sterna anathallurum athalassos*)
Piping plover (*Charadrius melodus*)
Pallid sturgeon (*Scaphirhynchus albus*)
Lake sturgeon (*Acipenser fulvescens*)
Sturgeon chub (*Macrhybopsis gelida*)
Small white lady's slipper (*Cypripedium candidum*)
Northern redbelly dace (*Phoxinus eos*)
American ginseng (*Panax quinquefolium*)

Although American ginseng is a state listed species in Knox County, the project scope does **not** appear to be within the range of American ginseng. The range of Northern redbelly dace does not extend to Knox County and the project scope does **not** appear to be within the range of the Northern redbelly dace. American ginseng and Northern redbelly dace do not need to be included in your evaluation of effects to state listed species. There is no critical habitat for state listed species within the project area. **The project area is within the range of Western prairie fringed orchid (*Platanthera praeclara*) and this species should be included on your species list for an evaluation of effects.**

We made this species list based on a review of the material you sent, aerial photographs, topographic maps and our Nebraska Natural Heritage Database.

Please note that this correspondence does not satisfy requirements of the Nongame and Endangered Species Conservation Act. Under the authority Neb.Rev.Stat. §37-807 (3) of the Nebraska Nongame and Endangered Species Conservation Act, all Nebraska state agencies are required to consult with the Nebraska Game and Parks Commission to ensure that any actions authorized, funded or carried out by them do not jeopardize the continued existence of a state listed species. This requirement would extend to any state permit issued. Please contact me if you need assistance with determining the potential of an action to affect listed species.

All federally listed threatened and endangered species are also state listed. For assessment of potential impacts on federally listed, candidate or proposed threatened or endangered species, please contact Robert Harms, Nebraska Field Office, U.S. Fish and Wildlife Service, 203 W. Second St., Grand Island, NE 68801.

Thank you for the opportunity to comment. If you have any questions or need additional information, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Michelle Koch". The signature is written in a cursive, flowing style.

Michelle R. Koch
Environmental Analyst Supervisor
Nebraska Natural Heritage Program
Nebraska Game and Parks Commission
(402) 471-5438, michelle.koch@nebraska.gov

CC: Robert Harms, USFWS
Brooke Stansberry, USFWS



Nebraska Game and Parks Commission

2200 N. 33rd St. / P.O. Box 30370 / Lincoln, NE 68503-0370

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January 29, 2010

Melissa Marinovich
HDR Inc.
8404 Indian Hills Drive
Omaha, NE 68114-4098

Dear Ms. Marinovich:

This letter is in regards to your request for information on state-listed threatened and endangered species, as well as natural communities specifically remnant prairies, and bald eagle nests, relating to the N-12 Niobrara East and West road project currently being evaluated in an Environmental Impact Statement (EIS).

Based on a review of our Nebraska Natural Heritage database, we have documented occurrences of/or the project is located within the range of the following state-listed threatened and endangered species.

The state-listed endangered **Interior least tern** (*Sternula antillarum athalassos*) and threatened **piping plover** (*Charadrius melodus*) are often found nesting together on riverine sandbars. Piping plovers feed on invertebrates found along the water edge while the least tern feeds on small fish, exclusively. Loss of sandbar nesting and foraging habitat due to alterations to the natural hydrograph, channelizations, and flow depletions have caused the decline of both species. Additionally, human disturbances also have impacted these species. We have records of least terns and piping plovers nesting on the Niobrara and Missouri rivers in the vicinity of the proposed project area.

The endangered **pallid sturgeon** (*Scaphirhynchus albus*) feeds on small fish and invertebrates. Often, the fish is found near river confluences, islands, and at the downstream margins of sandbars and is associated with diverse aquatic habitats. Alterations to the natural hydrograph, river channelizations, losses of sediment inputs due to bank stabilization, and flow depletions have caused the decline of this species. We have records of the pallid sturgeon in the vicinity of the proposed project area from the Missouri river and from the Niobrara river just upstream of its mouth.

The threatened **lake sturgeon** (*Acipenser fulvescens*) is believed to occupy habitats similar to the pallid sturgeon. Lake sturgeon feed on invertebrates and small fish and can be found at the downstream margins of islands and river confluences. Alterations to the natural hydrograph, river channelizations, and losses of sediment inputs due to bank stabilization, and flow depletions also have caused the decline of this species. The proposed project is within the range of the lake sturgeon, however we have no records for this species above Gavin's Point dam.

The endangered **sturgeon chub** (*Macrhybopsis gelida*) is associated with fast flowing water and a gravel riverbed. The species has been collected in side chutes and backwaters, as it is thought that these kinds of areas provide spawning habitat to the fish. Sturgeon chub feed on invertebrates. Similarly, to lake and pallid sturgeons, alterations to the natural hydrograph, depletions, and river channelizations have caused the decline of the sturgeon chub. The proposed project is within the range of the sturgeon chub, however we have no records for this species above Gavin's Point dam.

The endangered **American burying beetle** (*Nicrophorus americanus*) is a member of the carrion beetle family, and is an important part of the nutrient cycling process as they recycle decaying materials back into the ecosystem. The American burying beetle has been observed from April 1 to October 29, with peak periods of activity extending from June through August. These beetles are nocturnal and search widely for carrion. Carrion is not only a food source, but also an essential component of the reproductive cycle for this species. This species is found in a variety of habitats including grassland prairie, forest edge, scrubland, and mesic areas such as wet meadows, streams, and wetlands in association with relatively undisturbed semi-arid, sandhill and loam grasslands. The proposed project is within the range of the American burying beetle. Therefore, it is recommended that a survey be conducted for the American burying beetle if areas of suitable habitat may be impacted by proposed construction activities.

The threatened **Western prairie fringed orchid** (*Platanthera praeclara*) grows on mesic tall or mixed-grass prairies. Although the plant can be a colonizer species and grow on disturbed areas, it is found in greatest abundance on high quality prairie. The plant blooms in late June to July. We do not have records of this species in the project area, but the proposed project is within the range of this species. Therefore, if high quality prairie or wet meadows are identified within the project area and may be impacted by construction activities, it is recommended that a survey be conducted for this species.

The threatened **small white lady's slipper** orchid (*Cypripedium candidum*) grows in clumps with one flower at the tip of the flowering stem consisting of a white, pouch-shaped "slipper". This insect pollinated plant is found in moist to wet prairies, fens, and sedge meadows. This orchid flowers from mid-May to June in Nebraska. We do not have records of this species in the project area, but the proposed project is within the range of this species. Therefore, if high quality prairie or wet meadows are identified within the project area and may be impacted by construction activities, it is recommended that a survey be conducted for this species.

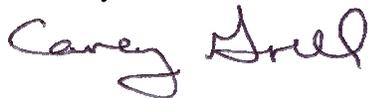
The threatened **river otter** (*Lutra canadensis*) is highly mobile and utilizes a large amount of space to meet its annual requirements. River otters typically live along wooded rivers and streams with sloughs and backwater areas and ponds. Ideal habitat has year-round open water with a plentiful food supply, including fish and crustaceans. Fallen trees, logjams, rock piles, and other structures in the water make good habitat for the otter's prey species and thus good habitat for the otter. River otters use a variety of dens throughout the year that were dug by other species such as beaver. They will also utilize upland dens such as rock, brush and log piles, hollow logs, or tree root structures. A female with young pups will typically only use one natal den until the pups are sufficiently mobile. We do have record of river otter in the Niobrara river several miles upstream from the confluence with the Missouri river. As mentioned above, this species is highly mobile and could also be utilizing habitat in the Missouri river. If construction will take place from February 15 to June 15, within ½ mile of the Niobrara or Missouri Rivers, surveys for river otter natal dens should be conducted by a qualified individual who has experience with the species.

The bald eagle (*Haliaeetus leucocephalus*) is no longer a state-listed species, but it does receive protection under the Bald and Golden Eagle Protection Act. Bald eagles utilize mature, forested riparian areas near rivers, streams, lakes, and wetlands, and are known to occur along all the major river systems in Nebraska during both the nesting and wintering periods. Disturbances within .5-mile of an active nest or within line-of-sight of a nest could cause eagles to discontinue nesting activities. There are two eagle nests that we are aware of in the vicinity of the proposed project. One nest is located on the Niobrara river in the vicinity of the Highway 12 bridge crossing. Another nest is on the Missouri river, along the south side of the river approximately 5-6 miles upstream of the Niobrara river confluence. For information on the current status of these eagle nests, please contact Mr. Stephen Wilson of the National Park Service to obtain the most recent monitoring information.

We also reviewed our Heritage database for records of prairie communities, but found no documented occurrences within the study area. Natural communities likely to be found in the study area include loess bluff mixedgrass prairie, tallgrass prairie, and deciduous woodlands within the Missouri River bluffs and breaks. The following natural community types have been deemed a priority for conservation in the Verdigre and Bazile Creek Watershed Biologically Unique Landscape as referenced in the Nebraska Natural Legacy Project: bur oak-basswood-ironwood forest, oak woodland, tallgrass prairie, loess bluff prairie, and northern sand/gravel prairie. The Missouri River Biologically Unique Landscape, which is made up of the river channel and floodplain, may contain natural communities such as sandbar/mudflat, backwater marsh, wet prairies, and floodplain forests (Schneider et al 2005). For reference, the Nebraska Natural Legacy Project may be found on our website at the following link:
<http://www.ngpc.state.ne.us/wildlife/programs/legacy/review.asp>

Thank you for the opportunity to provide this information. If you have any questions or require additional information, please contact me at (402) 471-5423 or carey.grell@nebraska.gov.

Sincerely,



Carey Grell
Environmental Analyst
Realty and Environmental Services Division

cc: Matt Rabbe, USFWS
Michelle Koch, NGPC

References

Schneider, R., M. Humpert, K. Stoner, G. Steinauer. 2005. *The Nebraska Natural Legacy Project – A Comprehensive Wildlife Conservation Strategy*. Nebraska Game and Parks Commission, Lincoln, Nebraska.

From: [Grell, Carey](#)
To: [Marinovich, Melissa](#)
Subject: N-12, Niobrara East and West project info request
Date: Monday, February 01, 2010 10:07:45 AM
Attachments: [HDR-T&E info request N-12 Niobrara East and West-Jan10.pdf](#)

Melissa,

This is in response to your request for information related to the N-12, Niobrara East and West project.

After checking with our District staff, the best way for you to obtain information on conservation easements (WRP/WREP) in the study area is to contact the NRCS directly....The person to contact would be Randy Epperson, as he is the WRP-WREP program manager and his phone number is 402-437-4048.

Secondly, as far as T&E records etc. go, it is not typical practice for us to provide specific point locations of these records. Rather, I have provided the requested information in the attached letter for your use. If you have any questions about this or the information in the letter, please let me know.

Thanks, and let me know if you need anything else.

Carey

Carey Grell
Environmental Analyst
Realty and Environmental Services Division
Nebraska Game and Parks Commission
Lincoln, Nebraska
402.471.5423



Nebraska Game and Parks Commission

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January 29, 2010

Melissa Marinovich
HDR Inc.
8404 Indian Hills Drive
Omaha, NE 68114-4098

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Based on a review of our Nebraska Natural Heritage database, we have documented occurrences of/or the project is located within the range of the following state-listed threatened and endangered species.

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The endangered **pallid sturgeon** (*Scaphirhynchus albus*) feeds on small fish and invertebrates. Often, the fish is found near river confluences, islands, and at the downstream margins of sandbars and is associated with diverse aquatic habitats. Alterations to the natural hydrograph, river channelizations, losses of sediment inputs due to bank stabilization, and flow depletions have caused the decline of this species. We have records of the pallid sturgeon in the vicinity of the proposed project area from the Missouri river and from the Niobrara river just upstream of its mouth.

The threatened **lake sturgeon** (*Acipenser fulvescens*) is believed to occupy habitats similar to the pallid sturgeon. Lake sturgeon feed on invertebrates and small fish and can be found at the downstream margins of islands and river confluences. Alterations to the natural hydrograph, river channelizations, and losses of sediment inputs due to bank stabilization, and flow depletions also have caused the decline of this species. The proposed project is within the range of the lake sturgeon, however we have no records for this species above Gavin's Point dam.

The endangered **sturgeon chub** (*Macrhybopsis gelida*) is associated with fast flowing water and a gravel riverbed. The species has been collected in side chutes and backwaters, as it is thought that these kinds of areas provide spawning habitat to the fish. Sturgeon chub feed on invertebrates. Similarly, to lake and pallid sturgeons, alterations to the natural hydrograph, depletions, and river channelizations have caused the decline of the sturgeon chub. The proposed project is within the range of the sturgeon chub, however we have no records for this species above Gavin's Point dam.

The endangered **American burying beetle** (*Nicrophorus americanus*) is a member of the carrion beetle family, and is an important part of the nutrient cycling process as they recycle decaying materials back into the ecosystem. The American burying beetle has been observed from April 1 to October 29, with peak periods of activity extending from June through August. These beetles are nocturnal and search widely for carrion. Carrion is not only a food source, but also an essential component of the reproductive cycle for this species. This species is found in a variety of habitats including grassland prairie, forest edge, scrubland, and mesic areas such as wet meadows, streams, and wetlands in association with relatively undisturbed semi-arid, sandhill and loam grasslands. The proposed project is within the range of the American burying beetle. Therefore, it is recommended that a survey be conducted for the American burying beetle if areas of suitable habitat may be impacted by proposed construction activities.

The threatened **Western prairie fringed orchid** (*Platanthera praeclara*) grows on mesic tall or mixed-grass prairies. Although the plant can be a colonizer species and grow on disturbed areas, it is found in greatest abundance on high quality prairie. The plant blooms in late June to July. We do not have records of this species in the project area, but the proposed project is within the range of this species. Therefore, if high quality prairie or wet meadows are identified within the project area and may be impacted by construction activities, it is recommended that a survey be conducted for this species.

The threatened **small white lady's slipper** orchid (*Cypripedium candidum*) grows in clumps with one flower at the tip of the flowering stem consisting of a white, pouch-shaped "slipper". This insect pollinated plant is found in moist to wet prairies, fens, and sedge meadows. This orchid flowers from mid-May to June in Nebraska. We do not have records of this species in the project area, but the proposed project is within the range of this species. Therefore, if high quality prairie or wet meadows are identified within the project area and may be impacted by construction activities, it is recommended that a survey be conducted for this species.

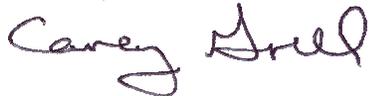
The threatened **river otter** (*Lutra canadensis*) is highly mobile and utilizes a large amount of space to meet its annual requirements. River otters typically live along wooded rivers and streams with sloughs and backwater areas and ponds. Ideal habitat has year-round open water with a plentiful food supply, including fish and crustaceans. Fallen trees, logjams, rock piles, and other structures in the water make good habitat for the otter's prey species and thus good habitat for the otter. River otters use a variety of dens throughout the year that were dug by other species such as beaver. They will also utilize upland dens such as rock, brush and log piles, hollow logs, or tree root structures. A female with young pups will typically only use one natal den until the pups are sufficiently mobile. We do have record of river otter in the Niobrara river several miles upstream from the confluence with the Missouri river. As mentioned above, this species is highly mobile and could also be utilizing habitat in the Missouri river. If construction will take place from February 15 to June 15, within ½ mile of the Niobrara or Missouri Rivers, surveys for river otter natal dens should be conducted by a qualified individual who has experience with the species.

The bald eagle (*Haliaeetus leucocephalus*) is no longer a state-listed species, but it does receive protection under the Bald and Golden Eagle Protection Act. Bald eagles utilize mature, forested riparian areas near rivers, streams, lakes, and wetlands, and are known to occur along all the major river systems in Nebraska during both the nesting and wintering periods. Disturbances within .5-mile of an active nest or within line-of-sight of a nest could cause eagles to discontinue nesting activities. There are two eagle nests that we are aware of in the vicinity of the proposed project. One nest is located on the Niobrara river in the vicinity of the Highway 12 bridge crossing. Another nest is on the Missouri river, along the south side of the river approximately 5-6 miles upstream of the Niobrara river confluence. For information on the current status of these eagle nests, please contact Mr. Stephen Wilson of the National Park Service to obtain the most recent monitoring information.

We also reviewed our Heritage database for records of prairie communities, but found no documented occurrences within the study area. Natural communities likely to be found in the study area include loess bluff mixedgrass prairie, tallgrass prairie, and deciduous woodlands within the Missouri River bluffs and breaks. The following natural community types have been deemed a priority for conservation in the Verdigre and Bazile Creek Watershed Biologically Unique Landscape as referenced in the Nebraska Natural Legacy Project: bur oak-basswood-ironwood forest, oak woodland, tallgrass prairie, loess bluff prairie, and northern sand/gravel prairie. The Missouri River Biologically Unique Landscape, which is made up of the river channel and floodplain, may contain natural communities such as sandbar/mudflat, backwater marsh, wet prairies, and floodplain forests (Schneider et al 2005). For reference, the Nebraska Natural Legacy Project may be found on our website at the following link:
<http://www.ngpc.state.ne.us/wildlife/programs/legacy/review.asp>

Thank you for the opportunity to provide this information. If you have any questions or require additional information, please contact me at (402) 471-5423 or carey.grell@nebraska.gov.

Sincerely,



Carey Grell
Environmental Analyst
Realty and Environmental Services Division

cc: Matt Rabbe, USFWS
Michelle Koch, NGPC

References

Schneider, R., M. Humpert, K. Stoner, G. Steinauer. 2005. *The Nebraska Natural Legacy Project – A Comprehensive Wildlife Conservation Strategy*. Nebraska Game and Parks Commission, Lincoln, Nebraska.

From: Steven_Mietz@nps.gov
To: Pillard_Matt; Rebecca.J.Latka@usace.army.mil
Cc: Carey_Grell; Gia_Wagner; John_Cochnar@fws.gov; John_Macy@nps.gov; Mike_George@fws.gov; Robert_Harms@fws.gov; Matt_Rabbe@fws.gov
Subject: Re: Nebraska Highway 12 Niobrara East and West - Concurrence Point 2b
Date: Wednesday, September 22, 2010 10:09:36 AM

Thank you for taking the time on Sept. 15th to review this project with the cooperators. As was discussed at that meeting and in the email below, there is concern about not including the environmental mitigation costs in the cost screening of alternatives. The NPS agrees with the FWS appraisal that the costs for environmental mitigation could alter which alternatives meet the 1.5-2x threshold and will defer its concurrence with point 2b until that information has been used to determine the range of alternatives that will be carried forward. Upon review of the mitigation costs, the NPS should be able to move forward with concurrence point 2b. Thank you for your continued collaborative efforts to develop a high quality document.

- Steve

Steve Mietz
Superintendent
Missouri National Recreational River

Matt_Rabbe@fws.gov

v

To
09/22/2010 09:18 AM "Pillard, Matt" <Matt.Pillard@hdrinc.com>, Rebecca.J.Latka@usace.army.mil
cc
Robert_Harms@fws.gov, "Carey Grell" <carey.grell@nebraska.gov>, "Gia Wagner" <Gia_Wagner@nps.gov>, "Steven Mietz" <Steven_Mietz@nps.gov>, <John_Macy@nps.gov>, Mike_George@fws.gov, John_Cochnar@fws.gov
Subject
Nebraska Highway 12 Niobrara East and West - Concurrence Point 2b

We are responding to your September 16, 2010, letter regarding "Concurrence in Alternatives Carried Forward for Environmental Impact Statement". We

appreciate the opportunity to provide comments and input in this process.

The Service has consistently maintained a position that costs associated with environmental impacts and mitigation could significantly affect the total cost associated with any given alternative and that these associated costs should be included in the cost estimates. As previously discussed at a February 2, 2010, conference call and September 15, 2010, meeting, the total cost for each alternative, inclusive of environmental mitigation costs should be considered especially since costs are being utilized by the Corps as screening criteria for selecting alternatives for further consideration in the EIS for this proposed project. We recognize the potential for environmental impacts to alter an alternatives' total cost relative to the threshold of 1.5-2X the minimum alternative cost. For this reason, the Service must defer its concurrence with the alternatives carried forward until information is provided that includes estimates of environmental impacts and a projected mitigation cost associated with each alternative. Once this additional information is provided, we will have all the information needed to move forward with concurrence point 2b, range of alternatives carried forward.

Additionally, we request information on the litigation case used as reference for determining a threshold for what is considered impracticable related to cost. Specifically, we are interested in knowing whether costs associated with environmental impacts/mitigation were included in the alternatives that used this threshold of 1.5-2X the minimum alternative cost which is being applied to this project. You had indicated that the cost exceedance threshold was upheld in courts but other aspects related to cost were not. Any additional information related to the litigation case used as reference in determining the cost threshold would be greatly appreciated.

We appreciate your continuing efforts in completion of Chapter 2, alternatives carried forward for the EIS, and we look forward to working with you in the future.

Matthew Rabbe
Wildlife Biologist
US Fish and Wildlife Service
203 W. 2nd St., Grand Island, NE 68801
Phone # (308) 382-6468 ex. 25
Cell # (308) 379 5562

From: Matt_Rabbe@fws.gov
To: Pillard_Matt; Rebecca.J.Latka@usace.army.mil
Cc: Robert_Harms@fws.gov; [Carey Grell](mailto:Carey_Grell); [Gia Wagner](mailto:Gia_Wagner); [Steven Mietz](mailto:Steven_Mietz); [John Macy@nps.gov](mailto:John_Macy@nps.gov); [Mike George@fws.gov](mailto:Mike_George@fws.gov); [John Cochnar@fws.gov](mailto:John_Cochnar@fws.gov)
Subject: Nebraska Highway 12 Niobrara East and West - Concurrence Point 2b
Date: Wednesday, September 22, 2010 9:18:29 AM

We are responding to your September 16, 2010, letter regarding "Concurrence in Alternatives Carried Forward for Environmental Impact Statement". We appreciate the opportunity to provide comments and input in this process.

The Service has consistently maintained a position that costs associated with environmental impacts and mitigation could significantly affect the total cost associated with any given alternative and that these associated costs should be included in the cost estimates. As previously discussed at a February 2, 2010, conference call and September 15, 2010, meeting, the total cost for each alternative, inclusive of environmental mitigation costs should be considered especially since costs are being utilized by the Corps as screening criteria for selecting alternatives for further consideration in the EIS for this proposed project. We recognize the potential for environmental impacts to alter an alternatives' total cost relative to the threshold of 1.5-2X the minimum alternative cost. For this reason, the Service must defer it's concurrence with the alternatives carried forward until information is provided that includes estimates of environmental impacts and a projected mitigation cost associated with each alternative. Once this additional information is provided, we will have all the information needed to move forward with concurrence point 2b, range of alternatives carried forward.

Additionally, we request information on the litigation case used as reference for determining a threshold for what is considered impracticable related to cost. Specifically, we are interested in knowing whether costs associated with environmental impacts/mitigation were included in the alternatives that used this threshold of 1.5-2X the minimum alternative cost which is being applied to this project. You had indicated that the cost exceedance threshold was upheld in courts but other aspects related to cost were not. Any additional information related to the litigation case used as reference in determining the cost threshold would be greatly appreciated.

We appreciate your continuing efforts in completion of Chapter 2, alternatives carried forward for the EIS, and we look forward to working with you in the future.

Matthew Rabbe
Wildlife Biologist
US Fish and Wildlife Service
203 W. 2nd St., Grand Island, NE 68801
Phone # (308) 382-6468 ex. 25
Cell # (308) 379 5562

From: William.Arwood@state.sd.us
To: [Cambridge, John](#)
Cc: [Pillard, Matt](#)
Subject: RE: Nebraska Highway N-12 Floodplain Analysis
Date: Monday, May 02, 2011 5:13:02 PM

Mr. Cambridge,

Thanks for contacting me regarding the issue. To clarify Bon Homme County and all communities within Bon Homme County do not currently have FIRMS (Flood Insurance Rate Maps). As such, just because they do not have a map doesn't mean that there is no threat of flooding. It happens to be that there are no "Floodplains" or 100-year flood stage areas identified, also known as ZONE A's (HIGH RISK AREAS). However, all of the communities in Bon Homme County including County jurisdiction are communities identified as Zone c and Zone x indicating there is a low to moderate risk of flooding. To be more specific, there are no high risk areas identified. Those high risk areas are the locations concerned with requiring Floodplain development permits from the local authority for any work completed in an identified floodplain, as required by the National Flood Insurance Program, and CFR. 44. That doesn't apply to this situation, but I would recommend checking with the local officials, to determine if they will still require a permit, as they have the land use authority. Please feel free to call me or respond if you have any questions.

Thanks,

William Arwood
SD NFIP Coordinator
605-773-3231

From: Cambridge, John [mailto:John.Cambridge@hdrinc.com]
Sent: Mon 5/2/2011 12:18 PM
To: Arwood, William
Cc: Pillard, Matt
Subject: Nebraska Highway N-12 Floodplain Analysis

William,

Thank you for returning my call to discuss the floodplain development questions I had for the proposed N-12 roadway project shown in orange on the attached figure.

I will send your office a formal written inquiry regarding the floodplain development permit and appreciate your offer to provide written response for our records regarding South Dakota's disposition of permit application inquiry so we can include it in our documentation of permits required for the project.

As we discussed, although based on currently available information it appears a permit will not be required since no floodplain has been delineated in South Dakota, I will provide your office with the packet of floodplain information prepared for this project.

I have attached a map of the project area and included below an excerpt from the project description for your orientation. I can be reached at the numbers provided below if you

have any questions.

Best Regards,
John

Background

HDR has been contacted by United States Corps of Engineers (USACE) and Nebraska Department of Roads (NDOR) staff to perform a hydraulic analysis of the proposed alignment for the Nebraska Highway N-12 relocation project. The proposed project has potential impacts on three distinct floodplain conditions; Lewis and Clark Reservoir storage, Missouri River conveyance, and tributary crossings. Sections of the eastern portion are likely located in the upper portion of Lewis and Clark Lake formed by the Gavin's Point Dam across the Missouri River, sections of the eastern and western portions are located the Missouri River floodplain, the upland segments of the eastern and western portions cross numerous tributaries that have delineated floodplains, and there are several tributary crossings in the bottomlands that are likely influenced by either the Lewis and Clark Lake or the Missouri River floodplain elevations. Land development activities in the Missouri River floodplain and Lewis and Clark Reservoir storage area will require permits from the appropriate regulatory jurisdictions.

Based on our discussions with representatives of the USACE Flood Risk and Floodplain Management Section and of the Nebraska Department of Natural Resources Floodplain/Dam Safety/Surveys Division, it appears there is no hydraulic model of the Missouri River upstream of Gavin's Point Dam. There is an un-numbered A Zone delineated on the Nebraska side of the Missouri River in Knox County but there is no floodplain delineated on the South Dakota side of the Missouri River.

Discussions with the South Dakota Office of Emergency Management confirm that if the FEMA Map Service Center indicates there is no effective FIRM for Bon Homme County, South Dakota, then there is no delineated floodplain on the South Dakota side of the Missouri River in Bon Homme County. The proposed project will need to comply with Knox County Floodplain Regulations for development in a Zone A floodplain and correspondence will be sent to the South Dakota Office of Emergency Management to confirm that since there is no floodplain delineated, no development permit would be required from Bon Homme County, South Dakota.

John Cambridge, P.E. CFM
Senior Water Resources Engineer
HDR ONE COMPANY/Many Solutions

601 Cornhusker Office Plaza
301 South 13th Street
Lincoln, NE 68508-2532
402.742.2903 voice
402.742.2930 fax

From: Gia_Wagner@nps.gov
To: Latka_Rebecca_J_NWO
Cc: Pillard_Matt; Hall_Meagan; Dan_Wiley@nps.gov
Subject: RE: visual resources (UNCLASSIFIED)
Date: Wednesday, May 11, 2011 1:04:01 PM
Attachments: [Highway12_Visual_May2011.docx](#)

(See attached file: Highway12_Visual_May2011.docx)

See the attached. The document provides the methods but does not provide the actual evaluations; we assume HDR will be doing that work. I hope this meets your expectations. Please contact me or Dan Wiley (402)-661-1830 if you have questions.

Gia Wagner
Chief, Resources Management Division
Missouri National Recreational River
508 East Second Street
Yankton, SD 57078

(605) 665-0209, ext 30



United States Department of the Interior

NATIONAL PARK SERVICE
Missouri National Recreational River
508 E. 2nd Street
Yankton, South Dakota 57078

REPLY REFER TO:
N7615 (MNRR)

****OFFICIAL CORRESPONDENCE SENT VIA EMAIL****

May 11, 2011

Memorandum

To: Rebecca Latka, Project Manager, US Army Corps of Engineers

From: Gia Wagner, Chief- Resources Management, Missouri National Recreational River and Dan Wiley, Chief-Resources Stewardship, Lewis and Clark National Historic Trail

Subject: Visual Resource Assessments-Highway 12

The Nebraska Highway 12 Niobrara East and West Project location within the Missouri River floodplain places it, in part, within the legislated boundaries of the 39-mile reach of the Missouri National Recreational River. The National Park Service (NPS) manages this area under the Wild and Scenic Rivers Act. This project area also parallels the Lewis and Clark National Historic Trail, which in this region follows the course of the river. In addition, Highway 12 is the designated auto tour route for the historic trail. The historic trail is administered by the NPS under the National Trails System Act. Both the recreational river and trail have further management direction from the NPS Organic Act of 1916, National Historic Preservation Act of 1966, NPS Management Policies 2006, and individual management plans. These Acts, policies, and plans all address NPS's responsibility to preserve scenic resources for the use and enjoyment of current and future generations. Therefore, the NPS must consider the potential effects on visual resources and visitor experience from the alternative routes under consideration in the Niobrara East and West Project. Limited analyses and site visits by NPS staff suggest there may be positive and negative effects associated with each alternative.

To better understand the potential effects on visual resources and visitor experience, the NPS recommends site-specific view shed determination and visual simulation be done for the public use areas in the attached table. These include interpretive overlooks and river access points with views toward the project area and where visitors can observe the landscape at length. A point in the river channel is suggested to reflect the typical visual experience of recreationists on the Missouri River in the project area. In addition to the specific sites, the visual experience of motorists traveling Highway 12 on any of the alternatives is also of concern since it is both the Outlaw Trail Scenic Byway and Lewis and Clark National Historic Trail auto tour route.

Because of the numerous software and equipment options available, the NPS cannot specify a particular process for view shed analyses or visual stimulation. It is expected that HDR (contractors for this project) will use methods meeting current industry standards and capable of meeting the following criteria:

- Ground truthing of computer-generated view sheds

- If photo manipulation is used for visual simulations (i.e., Adobe PhotoShop or similar software):
 - Digital photos used as base images should correspond with normal human field of view (i.e., 45-55 degree image field of view, not panoramic images)
 - Photos should be obtained on cloudless days with low humidity
 - Photos should be obtained when sun fully illuminates landscape without “backlighting” scene
 - Scaling of elements added to images, such as roadways, ROWs and representative traffic, should be accurate.

- If visual simulation software is used (i.e., ArcScene, Visual Nature, World Construction Set, Nature Studio, among many others), it should:
 - Be based on digital elevation models (DEMs)
 - Precisely place viewer location
 - Generate realistic vegetation and structural elements
 - Accurately scale added objects
 - Provide line of sight viewing
 - Replicate atmospheric conditions and sun position

We recommend that USACE and NPS reach an agreement on the methods to be used for view shed determination and visual simulations for this project prior to conducting the analysis.

Missouri National Recreation River and Lewis and Clark National Historic Trail
Public access locations with views of Nebraska Highway 12 Niobrara East and West Project Area

Site:	Type:	Coordinates:	Bearing ¹	Approximate distance to most visible part of project ²	Photo simulation notes ^{3, 4}
Chief Standing Bear Bridge	Interpretive pull off	42° 46' 11.456" -97° 59' 24.488"	162° 205°	1.9 mile 1.75 mile	Two base images, different directions
Running Water	Boat access	42° 46' 14.6" -97° 58' 44.49"	170°	1.9 miles	
Bazile Wildlife Management Area	Boat access	42° 45' 53.73" -97° 57' 11.386"	240°	2 miles	
Niobrara State Park high point	Interpretive pull off	42° 45' 36.708" -98° 4' 0.792"	105°	3.4 miles	
Niobrara State Park Group lodge	Interpretive overlook	42° 46' 27.439" -98° 4' 27.439"	295°	0.95 mile	
Missouri River channel	Recreational use area	42° 47' 58.14" -98° 5' 11.804"	185° 220°	1.7 mile 1.7 mile	Two base images, different directions

- ¹ Recommended direction for photo base images, from magnetic north
- ² The visual resource distance zones used by the Lewis and Clark National Historic Trail are: Foreground = 0- ½ mile, Middle Ground = ½ to 5 miles. With the project area paralleling the relatively narrow river valley in this region, all alternatives lie within 3 miles of the recreational river and national historic trail.
- ³ Three separate simulations should be provided for each site and base image, one for the parallel alignment, base of the bluffs, and bluff top alternatives. The south of the bluffs route in the Niobrara West project area is not visible in the middle ground from the recommended public use sites and has limited visibility from the route to the Missouri River Valley. Site-specific view shed determination or visual simulations are not requested for that route at this time.
- ⁴ The assumption is that the existing Highway 12 will be removed from the floodplain should the base of the bluff or bluff top alternative be selected. Visual simulations should reflect this removal.

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Nebraska Field Office
203 West Second Street
Grand Island, Nebraska 68801

September 1, 2011

FWS-NE: 2011-475

Ms. Rebecca J. Latka
U.S. Army Corps of Engineers
Regulatory Branch
1616 Capitol
Omaha, NE 68102-9000

RE: Nebraska Highway 12, Niobrara East and West Project, request for updated species list, Knox County, Nebraska

Dear Ms. Latka:

Becky

This responds to your August 10, 2011, request for concurrence from the U.S. Fish and Wildlife Service (Service) regarding your request for an updated threatened and endangered species list for the proposed N-12 Niobrara East and West Highway construction project. The Service has responsibility for conservation and management of fish and wildlife resources for the benefit of the American public under the following authorities: 1) Endangered Species Act of 1973 (ESA), 2) Fish and Wildlife Coordination Act (FWCA), 3) Bald and Golden Eagle Protection Act (Eagle Act), and 4) Migratory Bird Treaty Act (MBTA). The National Environmental Policy Act (NEPA) requires compliance with all of these statutes and regulations. The project proponent and lead federal agency are responsible for compliance with these federal laws.

The Service provided an initial species list and comments under the above mentioned authorities in our November 18, 2009, technical assistance letter. Since that time, the project and the N-12 Study area have been updated to reflect the Corps' alternative screening process. You provided the following updated species and critical habitat list that may occur within the Project area and are requesting our concurrence.

- American Burying Beetle (*Nicrophorus americanus*)
- Interior least tern (*Sterna anatillarum*)
- Piping plover (*Charadrius melodus*)
- Whooping Crane (*Grus americana*)
- Pallid sturgeon (*Scaphirhynchus albus*)
- Critical Habitat for Piping plover (*Charadrius melodus*)

The Service concurs with the above listed species. However, the Piping plover Critical Habitat designation for the Nebraska portion of the species range was vacated by the U.S. District Court on October 5, 2005. Therefore, Critical Habitat does not occur in the project area.

The Service appreciates the opportunity to review and comment on the subject project. Should you have questions regarding these comments, please contact Mr. Matt Rabbe within our office at matt_rabbe@fws.gov or (308)382-6468, extension 25.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael D. George". The signature is fluid and cursive, with the first name "Michael" being more legible than the last name "George".

Michael D. George
Nebraska Field Supervisor

cc: NGPC; Lincoln, NE (Attn: Michelle Koch)
NGPC; Lincoln, NE (Attn: Carey Grell)
NPS; Yankton, NE (Attn: John Macy)
NPS; Yankton, NE (Attn: Gia Wagner)



United States Department of the Interior

National Park Service

Midwest Region
601 Riverfront Drive
Omaha Nebraska 68102-4226



November 9, 2012

Ms. Becky Latka
Project Manager
United States Army Corps of Engineers
Omaha District Headquarters
1616 Capitol Avenue, Suite 9000
Omaha, Nebraska 68128

Dear Ms. Latka:

The National Park Service (NPS) reviewed the visual renderings submitted to us on September 19, 2012, for the proposed Nebraska State Highway 12 Project (Project) in Knox County, Nebraska. The NPS found the computer-generated renderings of alternative highway locations placed on the landscape very helpful in analyzing potential visual impacts of the Project alternatives on the NPS-administered Missouri National Recreational River (MNRR) and the Lewis and Clark National Historic Trail (Trail).

The outstanding scenic characteristics of the Missouri River and surrounding landscape in the Project area draw many visitors to the MNRR and Trail. These visitors are sensitive to the aesthetics that contribute to their experience. Under the Organic Act, the NPS is charged with conserving and providing for the enjoyment of the scenery within the areas it administers for current and future generations. In addition, MNRR and the Trail each have individual visual resource management objectives stemming from the legislation under which they were created.

The NPS made preliminary determinations of visual impact from each Key Observation Point (KOP) for each Project alternative, based on consideration of MNRR and Trail visitor sensitivities and our review of the visual renderings. The NPS defined three levels of visual impact to analyze the Project alternatives:

- **High Impact (3)**

Likely to cause a substantial long-term and negative effect on scenic quality, an existing viewshed, or KOP due to the visual contrast between the proposed project and the existing landscape conditions.

- **Moderate Impact (2)**

Likely to cause a noticeable, but not substantial change in scenic quality due to the visual contrast between the proposed project and the existing landscape conditions. Such a change would be noticeable to a sensitive viewer, but not all viewers.



- **Low/No Impact (1)**

Likely to cause no change or a negligible change in scenic quality due to the visual contrast between the proposed project and the existing landscape conditions.

An interdisciplinary team of the MNRR and Trail staff reviewed the visual renderings prepared for the Project. For each KOP, the team compared the existing condition rendering to each Project alternative rendering and dialogued regarding individuals' perceptions of an alternative's visual impact at each site. Each KOP was assigned a level of visual impact based on group consensus. The results are presented in the table below:

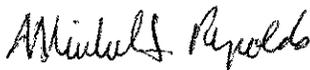
Nebraska Highway 12 Project Visual Impact Assessment

KOP	Level of Visual Impact by Alternative		
	Parallel	Base of Bluffs	Bluffs
	A2	A3	B1
Bazile Wildlife Management Area	2	1	1
Missouri River Channel East	1	1	3
Missouri River Channel West	1	1	3
Running Water	3	1	3
Chief Standing Bear Bridge East	3	1	3
Chief Standing Bear Bridge West	1	2	3
Niobrara State Park Group Lodge	1	1	3
Niobrara State Park High Point	1	1	2

The NPS appreciates the time and effort the U.S. Army Corps of Engineers (USACE) has devoted to developing a visual impact analysis for the Project Environmental Impact Statement (EIS). We hope our assessment informs USACE and the public of potential visual impacts to these sensitive areas and leads to consideration of ways to avoid, minimize, or mitigate impacts.

If you have any questions or concerns regarding our visual impact determinations, please contact Steven Mietz, Superintendent, Missouri National Recreational River at 605-665-0209 or at Steven_Mietz@nps.gov; or, Dan Wiley, Chief of Resources Stewardship, Lewis and Clark National Historic Trail at 402-661-1830 or at Dan_Wiley@nps.gov.

Sincerely,



Michael T. Reynolds
Regional Director



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
1616 CAPITOL
OMAHA, NEBRASKA 68102-9000

<https://www.nwo.usace.army.mil/html/od-rne/nehome.html>

April 1, 2015

Ms. Eliza Hines
U.S. Fish and Wildlife Service - Ecological Services
9325 South Alda Road
Wood River, NE 68883

RE: Nebraska Highway 12 Niobrara East & West
Request for an updated species list

Dear Ms. Hines:

The U.S. Army Corps of Engineers (Corps), Omaha District Regulatory Branch, is evaluating impacts of the Nebraska Highway 12 Niobrara East & West Project (N-12 Project) in Knox County, Nebraska. The Corps would like to request an updated list of species and/or critical habitat that may occur in the Study Area (see attached Project Study Area figure) from the U.S. Fish and Wildlife Service (USFWS), in order to evaluate the potential effects of the N-12 Project on those species and their habitat. An updated species list was last received from USFWS on September 1, 2011 (see attached).

The Corps created a preliminary species list based on:

- The September 1, 2011 USFWS Species List
- the March 2015 USFWS Species by County List (online at: <http://www.fws.gov/nebraskaes/Library/NECounty2015.pdf>),
- the March 2014 Nebraska Game and Parks Commission (NGPC) Species by County List,
- and the March 2014 NGPC Threatened and Endangered Species Range Maps (online at: http://outdoornebraska.ne.gov/wildlife/programs/nongame/Heritage/ET_Ranges.asp)

The Corps has determined the following species may occur within the Project Area and requests USFWS's concurrence and comment on this list:

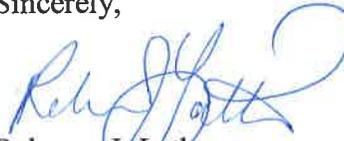
- American burying beetle (*Nicrophorus americanus*)
- Interior least tern (*Sterna anatillarum*)
- Northern long-eared bat (*Myotis septentrionalis*)
- Pallid sturgeon (*Scaphirhynchus albus*)
- Piping plover (*Charadrius melodus*)
- Rufa red knot (*Calidris canutus rufa*)
- Whooping crane (*Grus americana*)

No areas of critical habitat were identified within or near the Study Area.

Upon receiving concurrence, the Corps will evaluate the effects of the Project on the aforementioned species. Please reply to this letter with USFWS's agreement with this species list.

Please contact me by phone at (402) 995-2681 or by email at Rebecca.J.Latka@usace.army.mil if you have any questions or concerns.

Sincerely,



Rebecca J. Latka
N-12 Project Manager
Regulatory Branch

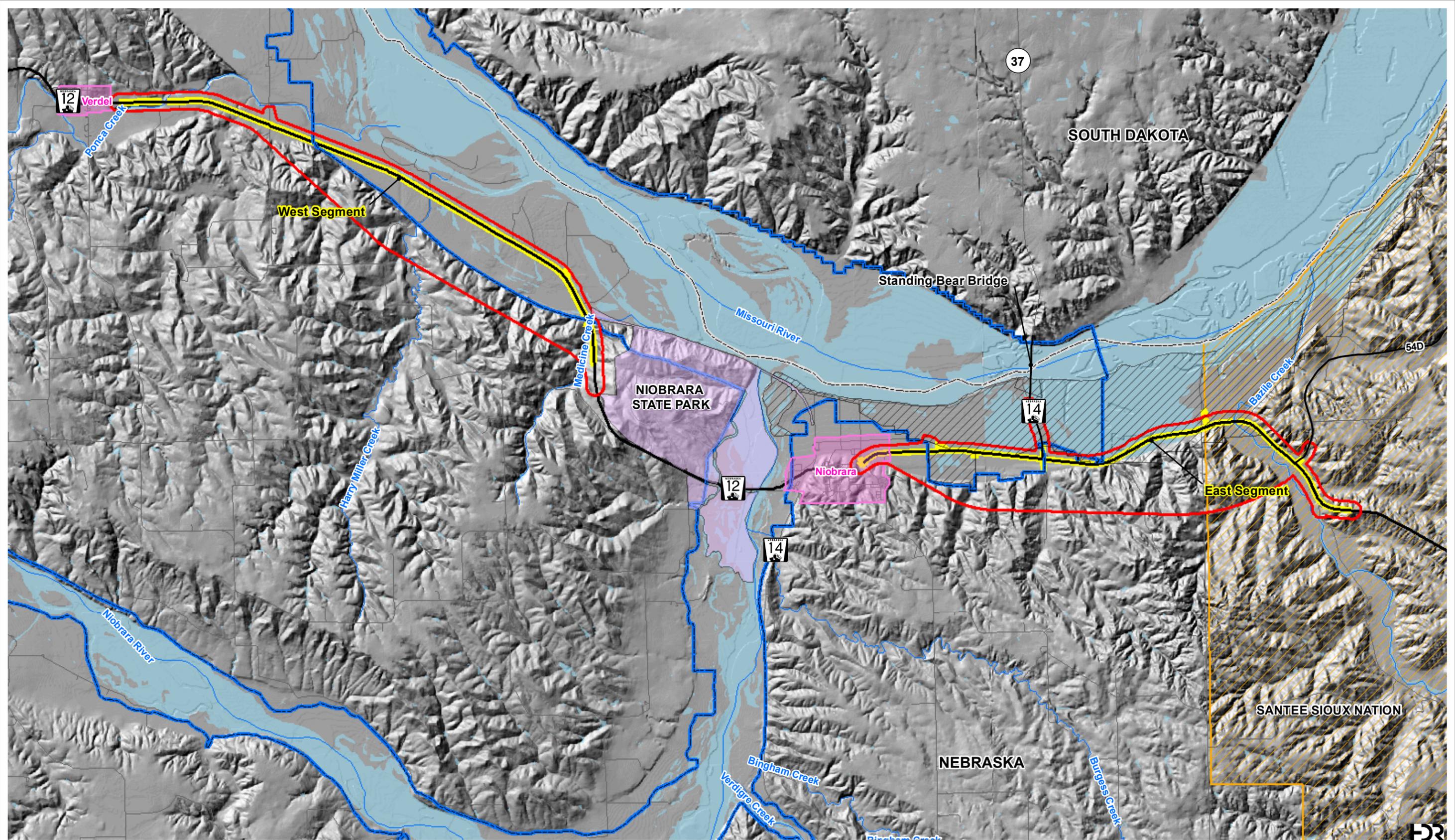
Copy Furnish

Matt Pillard
HDR Engineering Inc
8404 Indian Hills Drive
Omaha, NE 68114

Attachments

Figure 1 – Project Study Area
September 1, 2011 USFWS Letter

Z:\Projects\NDOR\84534_N12_EIS\map_docs\mxd\Final\EIS_Figures\Study_Area_Map_Fig_1_2.mxd



Legend	
	N-12 Segments
	Nebraska Highway 12
	Roads
	Study Area
	Waterways
	City Limits
	Counties
	Wildlife Management Areas
	Recreational River Boundary
	Santee Sioux Nation
	Niobrara State Park

1 0.5 0 1
 Miles

Project Study Area

Nebraska State Highway 12
 Knox County, Nebraska
 Environmental Impact Statement



DATE	March 2015
FIGURE	1-2

Aerial Imagery: 2006 NAIP, Knox County, Nebraska



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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Nebraska Field Office
203 West Second Street
Grand Island, Nebraska 68801

September 1, 2011

FWS-NE: 2011-475

Ms. Rebecca J. Latka
U.S. Army Corps of Engineers
Regulatory Branch
1616 Capitol
Omaha, NE 68102-9000

RE: Nebraska Highway 12, Niobrara East and West Project, request for updated species list, Knox County, Nebraska

Dear Ms. Latka:

Becky

This responds to your August 10, 2011, request for concurrence from the U.S. Fish and Wildlife Service (Service) regarding your request for an updated threatened and endangered species list for the proposed N-12 Niobrara East and West Highway construction project. The Service has responsibility for conservation and management of fish and wildlife resources for the benefit of the American public under the following authorities: 1) Endangered Species Act of 1973 (ESA), 2) Fish and Wildlife Coordination Act (FWCA), 3) Bald and Golden Eagle Protection Act (Eagle Act), and 4) Migratory Bird Treaty Act (MBTA). The National Environmental Policy Act (NEPA) requires compliance with all of these statutes and regulations. The project proponent and lead federal agency are responsible for compliance with these federal laws.

The Service provided an initial species list and comments under the above mentioned authorities in our November 18, 2009, technical assistance letter. Since that time, the project and the N-12 Study area have been updated to reflect the Corps' alternative screening process. You provided the following updated species and critical habitat list that may occur within the Project area and are requesting our concurrence.

- American Burying Beetle (*Nicrophorus americanus*)
- Interior least tern (*Sterna anatillarum*)
- Piping plover (*Charadrius melodus*)
- Whooping Crane (*Grus americana*)
- Pallid sturgeon (*Scaphirhynchus albus*)
- Critical Habitat for Piping plover (*Charadrius melodus*)

The Service concurs with the above listed species. However, the Piping plover Critical Habitat designation for the Nebraska portion of the species range was vacated by the U.S. District Court on October 5, 2005. Therefore, Critical Habitat does not occur in the project area.

The Service appreciates the opportunity to review and comment on the subject project. Should you have questions regarding these comments, please contact Mr. Matt Rabbe within our office at matt_rabbe@fws.gov or (308)382-6468, extension 25.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael D. George". The signature is fluid and cursive, with the first name "Michael" being more legible than the last name "George".

Michael D. George
Nebraska Field Supervisor

cc: NGPC; Lincoln, NE (Attn: Michelle Koch)
NGPC; Lincoln, NE (Attn: Carey Grell)
NPS; Yankton, NE (Attn: John Macy)
NPS; Yankton, NE (Attn: Gia Wagner)



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
1616 CAPITOL
OMAHA, NEBRASKA 68102-9000

April 21, 2015

<https://www.nwo.usace.army.mil/html/od-rne/nehome.html>

Ms. Michelle Koch
Nebraska Game and Parks Commission
2200 N. 33rd Street
Lincoln, Nebraska 68503

RE: N-12 Niobrara East & West
Request for a species list and Nebraska Natural Heritage Database search

Dear Ms. Koch:

The U.S. Army Corps of Engineers (Corps), Omaha District Regulatory Branch, is evaluating impacts of the Nebraska Highway 12 Niobrara East & West Project (N-12 Project) in Knox County, Nebraska. The Corps would like to request an updated list of species that may occur in the Study Area (see Figure 1) from the Nebraska Game and Parks Commission (NGPC), in order to evaluate the potential effects of the N-12 Project on those species and their habitat. A species list was last received from NGPC on January 15, 2010 and the database search was received January 29, 2010 (see attached).

The Corps has created a preliminary species list based on:

- the March 2015 USFWS Species by County List (online at: <http://www.fws.gov/nebraskaes/Library/NECounty2015.pdf>),
- the March 2014 Nebraska Game and Parks Commission (NGPC) Species by County List,
- and the March 2014 NGPC Threatened and Endangered Species Range Maps (online at: http://outdoornebraska.ne.gov/wildlife/programs/nongame/Heritage/ET_Ranges.asp)

The Corps has determined the following State- and Federally-listed species may occur within the Project Area and requests NGPC's concurrence and comment on this list:

- American burying beetle (*Nicrophorus americanus*)
- Interior least tern (*Sterna anatillarum*)
- Northern long-eared bat (*Myotis septentrionalis*)
- Lake sturgeon (*Acipenser fulvescens*)
- Pallid sturgeon (*Scaphirhynchus albus*)
- Piping plover (*Charadrius melodus*)
- River otter (*Lontra canadensis*)
- Rufa red knot (*Calidris canutus rufa*)
- Sturgeon chub (*Macrhybopsis gelida*)
- Whooping crane (*Grus americana*)

No areas of critical habitat were identified within or near the Study Area.

Upon receiving concurrence, the Corps will evaluate the effects of the Project on the aforementioned species. Please reply to this letter with NGPC's agreement with this species list.

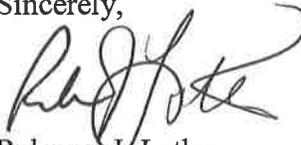
In addition, the Corps would like to request a database search for Nebraska Natural Heritage Database records of the following:

- Prairie remnants or other ecosystems of special concern
- T&E species occurrence data, especially any known existing state or federal plant species located within the Study Area
- Bald Eagle nesting sites in the Study Area and 0.5 mile surrounding

The Corps can provide an ArcGIS shapefile of the Study Area via email at your request.

Please contact me by phone at (402) 995-2681 or by email at Rebecca.J.Latka@usace.army.mil if you have any questions or concerns.

Sincerely,



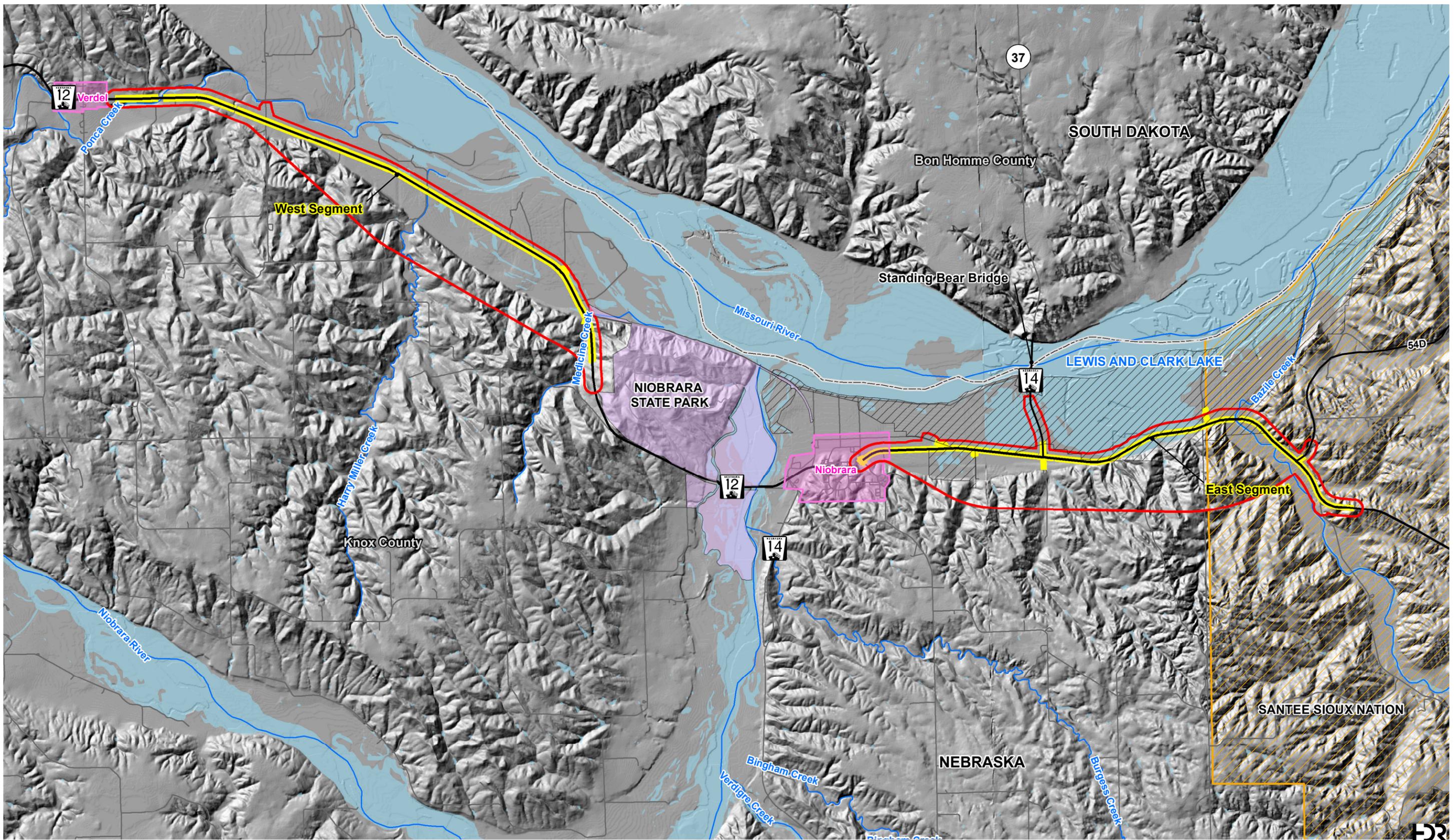
Rebecca J. Latka
N-12 Project Manager
Regulatory Branch

Copy Furnish

Matt Pillard
HDR Engineering Inc
8404 Indian Hills Drive
Omaha, NE 68114

Attachments
Figure 1 – Project Study Area
Past communication with NGPC

Z:\Projects\NDOR\84534_N12_EIS\map_docs\mxd\Final\EIS_Figures\Study_Area_Map_Fig_1_2.mxd



Aerial Imagery: 2006 NAIP, Knox County, Nebraska

Legend	
	N-12 Segments
	Nebraska Highway 12
	Roads
	Study Area
	Waterways
	City Limits
	Counties
	Wildlife Management Areas
	Recreational River Boundary
	Santee Sioux Nation
	Niobrara State Park

Project Study Area

N-12 Niobrara East and West
Knox County, Nebraska
Environmental Impact Statement



DATE	April 2015
FIGURE	1-2



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Nebraska Game and Parks Commission

2200 N. 33rd St. / P.O. Box 30370 / Lincoln, NE 68503-0370

Phone: 402-471-0641/ Fax: 402-471-5528 / www.OutdoorNebraska.org

January 15, 2010

Rebeca J. Latka
Department of the Army
Corps of Engineers, Omaha District
1616 Capitol
Omaha, NE 68102

Re: Request for concurrence on species list for Project: Nebraska Highway 12 Niobrara East and West

Dear Ms. Latka,

Please make reference to your letter regarding a concurrence with a list of state listed species for a project area in Knox County. The Nebraska Game and Parks Commission has responsibility for protecting threatened and endangered species under authority of the Nongame and Endangered Species Conservation Act (Neb. Rev. Stat. § 37-801-11) and we offer the following comments.

The species list you sent in your letter included the following species:

American burying beetle (*Nicrophorus americanus*)
Interior least tern (*Sterna anatillarum athalassos*)
Piping plover (*Charadrius melodus*)
Pallid sturgeon (*Scaphirhynchus albus*)
Lake sturgeon (*Acipenser fulvescens*)
Sturgeon chub (*Macrhybopsis gelida*)
Small white lady's slipper (*Cypripedium candidum*)
Northern redbelly dace (*Phoxinus eos*)
American ginseng (*Panax quinquefolium*)

Although American ginseng is a state listed species in Knox County, the project scope does **not** appear to be within the range of American ginseng. The range of Northern redbelly dace does not extend to Knox County and the project scope does **not** appear to be within the range of the Northern redbelly dace. American ginseng and Northern redbelly dace do not need to be included in your evaluation of effects to state listed species. There is no critical habitat for state listed species within the project area. **The project area is within the range of Western prairie fringed orchid (*Platanthera praeclara*) and this species should be included on your species list for an evaluation of effects.**

We made this species list based on a review of the material you sent, aerial photographs, topographic maps and our Nebraska Natural Heritage Database.

Please note that this correspondence does not satisfy requirements of the Nongame and Endangered Species Conservation Act. Under the authority Neb.Rev.Stat. §37-807 (3) of the Nebraska Nongame and Endangered Species Conservation Act, all Nebraska state agencies are required to consult with the Nebraska Game and Parks Commission to ensure that any actions authorized, funded or carried out by them do not jeopardize the continued existence of a state listed species. This requirement would extend to any state permit issued. Please contact me if you need assistance with determining the potential of an action to affect listed species.

All federally listed threatened and endangered species are also state listed. For assessment of potential impacts on federally listed, candidate or proposed threatened or endangered species, please contact Robert Harms, Nebraska Field Office, U.S. Fish and Wildlife Service, 203 W. Second St., Grand Island, NE 68801.

Thank you for the opportunity to comment. If you have any questions or need additional information, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Michelle R. Koch".

Michelle R. Koch
Environmental Analyst Supervisor
Nebraska Natural Heritage Program
Nebraska Game and Parks Commission
(402) 471-5438, michelle.koch@nebraska.gov

CC: Robert Harms, USFWS

Brooke Stansberry, USFWS



Nebraska Game and Parks Commission

2200 N. 33rd St. / P.O. Box 30370 / Lincoln, NE 68503-0370

Phone: 402-471-0641 / Fax: 402-471-5528 / www.OutdoorNebraska.org

January 29, 2010

Melissa Marinovich
HDR Inc.
8404 Indian Hills Drive
Omaha, NE 68114-4098

Dear Ms. Marinovich:

This letter is in regards to your request for information on state-listed threatened and endangered species, as well as natural communities specifically remnant prairies, and bald eagle nests, relating to the N-12 Niobrara East and West road project currently being evaluated in an Environmental Impact Statement (EIS).

Based on a review of our Nebraska Natural Heritage database, we have documented occurrences of/or the project is located within the range of the following state-listed threatened and endangered species.

The state-listed endangered **Interior least tern** (*Sternula antillarum athalassos*) and threatened **piping plover** (*Charadrius melodus*) are often found nesting together on riverine sandbars. Piping plovers feed on invertebrates found along the water edge while the least tern feeds on small fish, exclusively. Loss of sandbar nesting and foraging habitat due to alterations to the natural hydrograph, channelizations, and flow depletions have caused the decline of both species. Additionally, human disturbances also have impacted these species. We have records of least terns and piping plovers nesting on the Niobrara and Missouri rivers in the vicinity of the proposed project area.

The endangered **pallid sturgeon** (*Scaphirhynchus albus*) feeds on small fish and invertebrates. Often, the fish is found near river confluences, islands, and at the downstream margins of sandbars and is associated with diverse aquatic habitats. Alterations to the natural hydrograph, river channelizations, losses of sediment inputs due to bank stabilization, and flow depletions have caused the decline of this species. We have records of the pallid sturgeon in the vicinity of the proposed project area from the Missouri river and from the Niobrara river just upstream of its mouth.

The threatened **lake sturgeon** (*Acipenser fulvescens*) is believed to occupy habitats similar to the pallid sturgeon. Lake sturgeon feed on invertebrates and small fish and can be found at the downstream margins of islands and river confluences. Alterations to the natural hydrograph, river channelizations, and losses of sediment inputs due to bank stabilization, and flow depletions also have caused the decline of this species. The proposed project is within the range of the lake sturgeon, however we have no records for this species above Gavin's Point dam.

The endangered **sturgeon chub** (*Macrhybopsis gelida*) is associated with fast flowing water and a gravel riverbed. The species has been collected in side chutes and backwaters, as it is thought that these kinds of areas provide spawning habitat to the fish. Sturgeon chub feed on invertebrates. Similarly, to lake and pallid sturgeons, alterations to the natural hydrograph, depletions, and river channelizations have caused the decline of the sturgeon chub. The proposed project is within the range of the sturgeon chub, however we have no records for this species above Gavin's Point dam.

The endangered **American burying beetle** (*Nicrophorus americanus*) is a member of the carrion beetle family, and is an important part of the nutrient cycling process as they recycle decaying materials back into the ecosystem. The American burying beetle has been observed from April 1 to October 29, with peak periods of activity extending from June through August. These beetles are nocturnal and search widely for carrion. Carrion is not only a food source, but also an essential component of the reproductive cycle for this species. This species is found in a variety of habitats including grassland prairie, forest edge, scrubland, and mesic areas such as wet meadows, streams, and wetlands in association with relatively undisturbed semi-arid, sandhill and loam grasslands. The proposed project is within the range of the American burying beetle. Therefore, it is recommended that a survey be conducted for the American burying beetle if areas of suitable habitat may be impacted by proposed construction activities.

The threatened **Western prairie fringed orchid** (*Platanthera praeclara*) grows on mesic tall or mixed-grass prairies. Although the plant can be a colonizer species and grow on disturbed areas, it is found in greatest abundance on high quality prairie. The plant blooms in late June to July. We do not have records of this species in the project area, but the proposed project is within the range of this species. Therefore, if high quality prairie or wet meadows are identified within the project area and may be impacted by construction activities, it is recommended that a survey be conducted for this species.

The threatened **small white lady's slipper** orchid (*Cypripedium candidum*) grows in clumps with one flower at the tip of the flowering stem consisting of a white, pouch-shaped "slipper". This insect pollinated plant is found in moist to wet prairies, fens, and sedge meadows. This orchid flowers from mid-May to June in Nebraska. We do not have records of this species in the project area, but the proposed project is within the range of this species. Therefore, if high quality prairie or wet meadows are identified within the project area and may be impacted by construction activities, it is recommended that a survey be conducted for this species.

The threatened **river otter** (*Lutra canadensis*) is highly mobile and utilizes a large amount of space to meet its annual requirements. River otters typically live along wooded rivers and streams with sloughs and backwater areas and ponds. Ideal habitat has year-round open water with a plentiful food supply, including fish and crustaceans. Fallen trees, logjams, rock piles, and other structures in the water make good habitat for the otter's prey species and thus good habitat for the otter. River otters use a variety of dens throughout the year that were dug by other species such as beaver. They will also utilize upland dens such as rock, brush and log piles, hollow logs, or tree root structures. A female with young pups will typically only use one natal den until the pups are sufficiently mobile. We do have record of river otter in the Niobrara river several miles upstream from the confluence with the Missouri river. As mentioned above, this species is highly mobile and could also be utilizing habitat in the Missouri river. If construction will take place from February 15 to June 15, within ½ mile of the Niobrara or Missouri Rivers, surveys for river otter natal dens should be conducted by a qualified individual who has experience with the species.

The bald eagle (*Haliaeetus leucocephalus*) is no longer a state-listed species, but it does receive protection under the Bald and Golden Eagle Protection Act. Bald eagles utilize mature, forested riparian areas near rivers, streams, lakes, and wetlands, and are known to occur along all the major river systems in Nebraska during both the nesting and wintering periods. Disturbances within .5-mile of an active nest or within line-of-sight of a nest could cause eagles to discontinue nesting activities. There are two eagle nests that we are aware of in the vicinity of the proposed project. One nest is located on the Niobrara river in the vicinity of the Highway 12 bridge crossing. Another nest is on the Missouri river, along the south side of the river approximately 5-6 miles upstream of the Niobrara river confluence. For information on the current status of these eagle nests, please contact Mr. Stephen Wilson of the National Park Service to obtain the most recent monitoring information.

We also reviewed our Heritage database for records of prairie communities, but found no documented occurrences within the study area. Natural communities likely to be found in the study area include loess bluff mixedgrass prairie, tallgrass prairie, and deciduous woodlands within the Missouri River bluffs and breaks. The following natural community types have been deemed a priority for conservation in the Verdigre and Bazile Creek Watershed Biologically Unique Landscape as referenced in the Nebraska Natural Legacy Project: bur oak-basswood-ironwood forest, oak woodland, tallgrass prairie, loess bluff prairie, and northern sand/gravel prairie. The Missouri River Biologically Unique Landscape, which is made up of the river channel and floodplain, may contain natural communities such as sandbar/mudflat, backwater marsh, wet prairies, and floodplain forests (Schneider et al 2005). For reference, the Nebraska Natural Legacy Project may be found on our website at the following link:

<http://www.ngpc.state.ne.us/wildlife/programs/legacy/review.asp>

Thank you for the opportunity to provide this information. If you have any questions or require additional information, please contact me at (402) 471-5423 or carey.grell@nebraska.gov.

Sincerely,



Carey Grell
Environmental Analyst
Realty and Environmental Services Division

cc: Matt Rabbe, USFWS
Michelle Koch, NGPC

References

Schneider, R., M. Humpert, K. Stoner, G. Steinauer. 2005. *The Nebraska Natural Legacy Project – A Comprehensive Wildlife Conservation Strategy*. Nebraska Game and Parks Commission, Lincoln, Nebraska.

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United States Department of the Interior

PLEASE NOTE NEW ADDRESS AS OF 11/1/2014

****FISH AND WILDLIFE SERVICE****

Ecological Services
Nebraska Field Office
9325 South Alda Road
Wood River, Nebraska 68883

May 1, 2015

FWS-NE: 2015-217

Ms. Rebecca J. Latka, Project Manager
U.S. Army Corps of Engineers
Regulatory Branch
1616 Capitol
Omaha, NE 68102-9000

RE: Official Species List Request, Nebraska Highway 12 Niobrara East and West, Knox County, Nebraska

Dear Ms. Latka:

This responds to the April 3, 2015, request for an updated species list from the U.S. Fish and Wildlife Service (Service) for the subject project. The Service has responsibility for conservation and management of fish and wildlife resources for the benefit of the American public under the following authorities: 1) Endangered Species Act of 1973 (ESA); 2) Fish and Wildlife Coordination Act (FWCA); 3) Bald and Golden Eagle Protection Act (Eagle Act); and 4) Migratory Bird Treaty Act (MBTA). The National Environmental Policy Act requires compliance with all of these statutes and regulations.

In accordance with section 7 of ESA, the Service has determined that the following federally listed species may occur in the proposed project area or be affected by the proposed project:

<u>Listed Species</u>	<u>Expected Occurrence</u>
American burying beetle (<i>Nicrophorus americanus</i>) E	Mesic tall-grass prairie and wet meadows
Interior least tern (<i>Sternula antillarum</i>) E	Migration and nesting
Northern long eared bat (<i>Myotis septentrionalis</i>) T	Forested habitats, man-made structures
Pallid sturgeon (<i>Scaphirhynchus albus</i>) E	Missouri and lower Platte rivers

Piping plover (<i>Charadrius melodus</i>) T	Migration and nesting
Rufa red knot (<i>Calidris canutus rufa</i>) T	Rare, casual migrant
Western prairie fringed orchid T (<i>Platanthera praeclara</i>)	Tall-grass prairie and wet meadows
Whooping crane (<i>Grus americana</i>) E	Roosting, migrant

All federally listed species under ESA are also State-listed under the Nebraska Nongame and Endangered Species Conservation Act. However, there are also State-listed species that are not federally listed (i.e. river otter and sturgeon chub). To determine if the proposed project may affect State-listed species, the Service recommends that the project proponent contact Michelle Koch (michelle.koch@nebraska.gov) or Carey Grell (carey.grell@nebraska.gov), Nebraska Game and Parks Commission, 2200 N. 33rd Street, Lincoln, NE 68503-0370.

The Service appreciates the opportunity to provide comments on this proposed project. Should you have any questions regarding these comments, please contact Ms. Brooke Stansberry within our office at Brooke_Stansberry@fws.gov or at (308) 382-6468, extension 207.

Sincerely,



Eliza Hines
Nebraska Field Supervisor

cc: NGPC; Lincoln, NE (Attn: Michelle Koch)
NGPC; Lincoln, NE (Attn: Carey Grell)
NPS; Yankton, SD (Attn: John Macy)

From: [Simpson, Rachel](#)
To: [Schnoor, Meagan](#)
Subject: RE: Nebraska Data for Highway 12 EIS
Date: Wednesday, June 10, 2015 5:00:37 PM

Dear Meagan,

Please see below for results of a search of the Nebraska Natural Heritage Database per your request, using the shapefile you provided which represents your study area. You requested information from the database on ecosystems of special concern, any known occurrences of T&E species in the study area or within 5 miles of the study area, and any bald eagle nesting sites within 0.5 mile of the study area. As we discussed by phone you were looking for a list rather than needing location data. As we discussed by phone, I can provide data but can not provide concurrence on the species list to be evaluated in the N-12 EIS document. See below for information on project review.

We have very little information in the database for this area. We do not have any records in the database for natural communities within the study area. We have historical records from 1893, but no recent records, for Sturgeon Chub (*Macrhybopsis gelida*) and Blacknose shiner (*Notropis heterolepis*). We have no records in the database for other state or federal listed species. The database shows recent Bald Eagle nest sites within 0.5 mile of the study area.

Please be aware that although the Nebraska Natural Heritage database is the most up-to-date and comprehensive database available on the occurrences of rare species and natural communities, there are many areas of the state that have not been inventoried or reported on to the Natural Heritage Program. Similarly, the record of a rare species at a location does not imply that all taxonomic groups have been surveyed at that site or reported to the Natural Heritage Program. As such, the data should be interpreted with caution and an “absence of evidence is not evidence of absence” philosophy followed.

Please note that this correspondence does not satisfy requirements of the Nongame and Endangered Species Conservation Act. Under the authority Neb.Rev.Stat. §37-807 (3) of the Nebraska Nongame and Endangered Species Conservation Act, all Nebraska state agencies are required to consult with the Nebraska Game and Parks Commission to ensure that any actions authorized, funded or carried out by them do not jeopardize the continued existence of a state listed species. This requirement would extend to any state permit issued. Please contact Michelle Koch (Michelle.Koch@nebraska.gov, 402-471-5569) for assistance with determining the potential of an action to affect listed species.

Sincerely,
Rachel

Rachel Simpson, Ph.D.
Data Manager
Nebraska Natural Heritage Program

Nebraska Game and Parks Commission
2200 N. 33rd St.
Lincoln, NE 68503
rachel.simpson@nebraska.gov
402-471-5427



2200 N. 33rd St. • P.O. Box 30370 • Lincoln, NE 68503-0370 • Phone: 402-471-0641

June 11, 2015

Rebecca Latka
U.S. Army Corps of Engineers
1616 Capitol
Omaha, NE 68102-9000

RE: N-12 Niobrara East and West, Updated Species List

Dear Ms. Latka:

Nebraska Game and Parks Commission staff members have reviewed the information for the proposal identified above. The Corps of Engineers has prepared a list of state-listed threatened and endangered species that may occur within the project area, and is requesting concurrence on the list.

The Corps species list included the following state-listed threatened and endangered species:

American burying beetle (*Nicrophorus americanus*)
Interior least tern (*Sterna antillarum athalassos*)
Northern long-eared bat (*Myotis septentrionalis*)
Lake sturgeon (*Acipenser fulvescens*)
Pallid sturgeon (*Scaphirhynchus albus*)
Piping plover (*Charadrius melodus*)
River otter (*Lontra canadensis*)
Rufa red knot (*Calidris canutus rufa*)
Sturgeon chub (*Macrhybopsis gelida*)
Whooping crane (*Grus americana*)

Based on our review, we have verified that these species may occur within the project area and should be evaluated in the Environmental Impact Statement (EIS) for the N-12 Niobrara East and West project.

TIME OUTDOORS IS TIME WELL SPENT

OutdoorNebraska.org

Thank you for your continued coordination on this project. We look forward to the opportunity to review the Draft EIS when it is available. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Carey Grell". The signature is written in a cursive style with a large, looping initial 'C'.

Carey Grell
Environmental Analyst Supervisor
Planning and Programming Division

cc: Michelle Koch, NGPC
Brooke Stansberry, USFWS
Matt Pillard, HDR

Agenda

Project: N-12 Niobrara East and West EIS

Subject: Agency Review of PDEIS

Date: Thursday, July 16, 2015

Location: Nebraska Regulatory, Lake Wehrspann Field Office

Attendees: See Attached 1T

- I. Introductions
- II. Project Background
- III. Agency Review of PDEIS
- IV. Next Steps



Meeting Notes

Project:	Nebraska Highway 12 EIS	USACE Project No:	2004-10258-WEH
Transmitted to:	Becky Latka, USACE Shannon Sjolie, NDOR	NDOR Project No:	S-12-5(1011) CN 31674
Subject:	Agency Review of PDEIS		
Meeting Date:	July 17, 2015	Meeting Location:	Nebraska Regulatory Wehrspann Field Office/Teleconference and Lync Meeting

Attendees:
See Attached

Topics Discussed:

I. Introductions

Matt Pillard welcomed the group. He noted that the project does have an agency communication protocol that is in the process of being updated that outlines each agency's role. In addition, he added that the PDEIS is for internal review and distribution only and not to be shared with other agencies or the public. They will have an opportunity to review the DEIS. Each participant then introduced himself and summarized his agency's role in the PDEIS review.

- The U.S. Army Corps of Engineers (Corps) is responsible for issuing a Section 404 permit. The EIS is in response to NDOR's application.
- NDEQ will issue an individual 401 water quality certificate.
- EPA: The NEPA team will be rating the project and the EIS document. The Wetlands, Watersheds, and Stream Protection Section will review the 404 application and the NEPA document and coordination regarding Section 401 Certification on tribal land.
- NPS will provide a collective review of the project's impacts on the MNRR under Section 7(a) of the Wild and Scenic River Act, the Lewis and Clark National Historic Trail, and the viewshed.
- FHWA will provide a cooperating agency review of the EIS.
- USFWS will review compliance with Section 7 of ESA and the Bald and Golden Eagle Protection Act.
- NGPC will review fish and wildlife, recreation, 404/401, state lands and NESCA.
- Knox County, who is not present, will review the EIS as well.

II. Project Background

Matt Pillard summarized the project background. In the 90s, NDOR completed some road repairs resulting from dam construction and road flooding. NDOR and the Corps are in litigation after NDOR sued for the cost of the road repair. As NDOR developed a roadway and cost for a settlement, the amount of wetland impacts required an individual Section 404 permit and an avoidance and minimization analysis. In 2007, the Corps determined an EIS was needed and HDR was hired as the third-party contractor, who receives direction from the Corps, but is paid by NDOR. The project in the 90s was originally under civil works; NDOR completed a road raise and guardrail construction along some portions of the roadway. The Corps also moved the town of Niobrara in the 70s, with the exception of the school.

The participants were given a copy of the "Alternatives Development and Screening" timeline document and Matt Pillard walked through the alternatives, their redesign, and screening.

Dan Wiley (NPS) asked how much farther in height the new road would be above the existing road. Matt Pillard stated that HDR had completed an analysis of the height above the 100-year flood elevation, the existing road elevation, and where a new alignment is located, above the existing ground. HDR will locate that document and discuss it during the Chapter 2 review.

III. Agency Review of PDEIS

Chapter 1

Matt Pillard stated that previously NDOR applied for a Section 404 permit for Alternative A2. Becky Latka stated that the Corps has decided that Alternative A7 is their preliminary LEDPA. The Corps does not know at this point what NDOR will apply for. In the PDEIS, the BA and Section 7(a) documents were drafted as if the A2 is what is being applied for. It was pointed out that the Corps does not have a preferred alternative, which is typical in the NEPA process. The Corps, in this case, is just responding to a Section 404 application and their response is to deny a permit, issue a permit and issue a permit with modifications.

Larry Shepard (EPA) stated that in absence of a federally preferred alternative, the EPA will rate every alternative during its review.

Hector Santiago (NPS) clarified that NPS has regulatory constraints under the Wild and Scenic Rivers Act. Their evaluation standard is to avoid or eliminate adverse impacts on the values for which the river was listed. For example, in the visual analysis, any impact that was rated a 3 would not be an impact that could be avoided or eliminated. NPS suggested that the Corps let NDOR know about the ratings to guide its selection of the alternative they would apply for. The Corps will follow up with NDOR.

The Corps has been following NDOR's/FHWA's NEPA/404 Merge Process and obtaining concurrence from agencies at various concurrence points. The Corps has obtained concurrence on CP 1 Purpose and Need and CP 2a Range of Alternatives, but does not have concurrence on CP 2b, Alternatives Carried Forward. The Corps will follow up with NDOR. There was confusion at the meeting on what CP 3 and 4 are. They are Selected Alternative (CP3) and Impact Minimization (CP 4).

Jennifer Ousley (EPA) asked why only the Santee Reservation land was shown on the figures. Jennifer believes that Ponca has trust land/settlement areas in the Study Area. She asked about the tribal coordination that has been done to this point. Matt Pillard and Becky Latka stated that the Corps had met with both the Santee and Ponca tribes multiple times and has ongoing coordination planned. Meagan Schnoor pointed her to Appendix O in the PDEIS. HDR/Corps will review land ownership information to be obtained from Knox County and requested that EPA provide any tribal land ownership in their comments.

Scott Stapp (FHWA) noted that there is a lack of description of the EIS as a decision making document. He also stated that the way the alternatives are presented makes it look like it is pre-decisional. HDR will review and revise as necessary.

Chapter 2

The group reviewed a table developed by HDR that shows the height comparison. On average, the alternatives are between 8 and 12 feet above the 100 year flood elevation. A1 is 14-15 feet above the existing road. A2, A3, A4, and A7 are 17 to 20 feet above the existing ground elevation.

Rick Clark (NPS) expressed a need for an analysis of sheet flow and connectivity. He suggested a table that summarizes the connectivity of each alternative. Matt Pillard stated that beyond what was already presented in the PDEIS, the bridge lengths and the floodplain storage analysis in Appendix H, he was not certain how to do

so. The Corps does not have design information on all of the culverts. Meagan Schnoor stated that NDOR would design the culverts and bridges to equalize the water on either side of any of the alternatives. Rick suggested maybe looking at the acre-feet of passage. Scott Stapp (FHWA) suggested looking at 23 CFR 650 that looks at values of floodplain connectivity. The Corps will look into that reference and the NPS will think over how to do an analysis.

Scott Stapp (FHWA) stated that the Study Area seemed small for an EIS. Matt Pillard responded that each resource has a defined study area. For example, Meagan Schnoor stated that the threatened and endangered species analysis included the Missouri River beyond the Study Area. FHWA also noted that maintenance is not included as a cost. Becky Latka responded that the Corps screens on construction cost only, but maintenance and mitigation costs could be included as information in the EIS.

Larry Shepard (EPA) noted that because the No Action alternative is a permit denial, it appears that all action alternatives are permissible. He suggested that the No Action is where nothing happens to the road. HDR and the Corps will review that text and revise. Perhaps there needs to be a statement that just because an alternative is practicable, it is not necessarily permissible.

Rick Clark (NPS) stated that the "South of Bluffs" name may confuse the reader. (Is it south of the bluffs, meaning at the base of the bluffs?) It was suggested that it should be considered to rename this alternative.

Chapter 3

Hector Santiago (NPS) would like to see the ORVs outlined in Chapter 3.

EPA noted that as of August 28, the new clean water rule will be in effect, which changes the definition of jurisdictional waterways. Suggest including.

Matt Pillard stated that there are resources that were pulled out of Chapter 3 and 4 and placed in Appendix C. These resources should be named in Chapter 3 and 4. He also pointed out the addition of a context and intensity discussion under each resource. The Corps likes to categorize the impacts as negligible/minor/moderate/major.

Rick Clark (NPS) noted that the WSRA analysis was incomplete and asked if the agencies would know what NDOR is applying for in the fall? Becky Latka responded that the schedule is tied to when NDOR makes a decision on what they are applying for. Matt Pillard added that NDOR had been told that in order to meet the schedule of having a public meeting by the first week of November, a decision was needed by August. If the schedule is pushed, then we get into the holidays and bad travel weather.

NPS asked if the existing roadbed would remain. Matt Pillard stated that under A3 and A7 the road would be removed in its entirety. With A2, the wave berm would remain where the existing road is north of the proposed road. The group then discussed that it was unclear what road removal consisted of. Brooke Stansberry (USFWS) was familiar with projects where NDOR had just removed the asphalt. NPS needs clarification on what road removal consists of. The existing road needs to remain in place during construction to handle the N-12 traffic. The new road would be constructed with borrow material and then the old road would be removed after the traffic is moved onto the new road. It is possible that if the road is removed entirely, there could be significant wetland reclamation.

Matt Pillard also informed the group that NDOR had not identified borrow or waste sites. Brooke Stansberry (USFWS) noted that the Corps and USFWS have a process with NDOR on permitting/assessing borrow and waste sites at a later date.

Carey Grell (NGPC) thought the language in Section 4.3 was incorrect and that May Affect should be added. Meagan Schnoor (HDR) explained that the Section 7 language was used in lieu of creating minor/moderate/major categories for the impacts.

Larry Shepard (EPA) thought the waterways language was inadequate. He also felt a discussion on induced development was needed. Often when transportation reliability increases, development can follow. This should be included in the land use discussion, and/or secondary and cumulative effects analysis.

EPA stated that climate change should be addressed in the document. Matt Pillard pointed them to Appendix C and stated that the Corps had also completed a climate change memo.

NPS asked when mitigation would be identified. Becky Latka noted that NDOR should be determining that now. NPS, USFWS, NPGC should be included in the mitigation discussion.

It was discussed that the Corps is planning a user-friendly, graphics-heavy Executive Summary and showed the group three examples. A CD that contained the entire DEIS would be included with a printed Executive Summary.

IV. Next Steps

The Corps is planning for a public meeting in the first week of November. They would prefer to do an open house and public hearing, given the controversy of the project in Niobrara. The agencies are welcome to have a role (maybe at a table) in the meeting.

The Corps will revise the document based on agency comments and will call if clarification is needed. There will be no formal comment response to agency comments. If a comment is not addressed adequately in the DEIS, the agency can make another comment.

The Corps appreciated the agencies taking the time to attend the meeting and for their helpful review of the PDEIS.

Responsibility	Activity
Corps	Coordinate with NDOR on NPS visual analysis and their need to avoid or eliminate impacts
Corps	Follow up with NDOR on the NEPA/404 Merge concurrence process
Corps/HDR	Review land ownership for presence of Ponca tribal land
Corps/HDR	Look at Chapter 2 presentation of alternatives and revise any language that appears pre-decisional
Corps/HDR	Look at 23 CFR 650 as a way to address floodplain connectivity

Responsibility	Activity
Corps/HDR	Revise Chapter 2 to clarify that alternatives that are practicable aren't necessarily permissible.
Corps/HDR	Consider revising South of Bluffs moniker
Corps/HDR	Call out ORVs in Chapter 3
Corps/HDR	Update text to reflect update to jurisdictional waterways
Corps/HDR	Call out resources analyzed in Appendix C in Chapters 3/4
Corps	Coordinate with NDOR on what road removal consists of
Corps/HDR	Update text to reflect NDOR's process to get borrow or waste sites approved/permitted with USFWS and Corps
Corps/HDR	Update 4/3 to add may affect
Corps/HDR	Include an analysis of induced development
Corps	Arrange a meeting with NDOR, NPS, USFWS and NGPC on mitigation



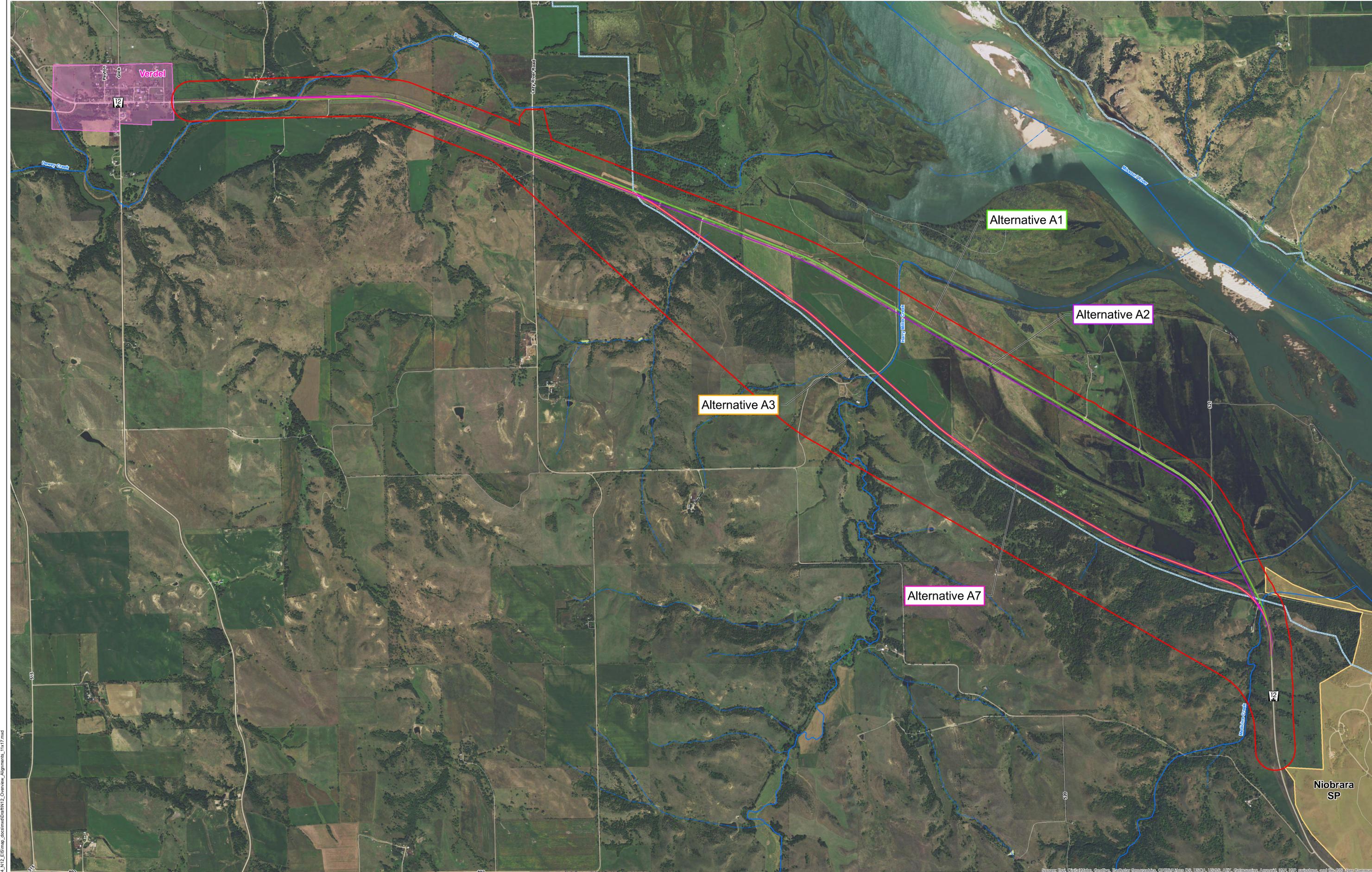
Meeting Attendees

Project: N-12, Niobrara East and West, EIS	HDR Project No: 84534
Lead Agency: U.S. Army Corps of Engineers Applicant: Nebraska Department of Roads	Project No: Corps – 2004-10258-WEH NDOR - S-12-5(1011) CN 31674
Meeting Date: July 17, 2015	Meeting Location: Wehrspann, Teleconference
Subject: PDEIS Agency Meeting	

Attending	Name	Representing	Phone	E-mail
<input checked="" type="checkbox"/>	Becky Latka	USACE	402-995-2681	Rebecca.J.Latka@usace.army.mil
<input checked="" type="checkbox"/>	John Moeschon	USACE	402-896-0896	John.L.Moeschen@usace.army.mil
<input checked="" type="checkbox"/>	Phil Rezac	USACE	402-896-0896	Phil.M.Rezac@usace.army.mil
<input checked="" type="checkbox"/>	Rick Clark	NPS	605-665-0209	Rick_clark@nps.gov
<input checked="" type="checkbox"/>	Nicholas Chevance	NPS		Nicholas_chevance@nps.gov
<input checked="" type="checkbox"/>	Hector Santiago	NPS		Hector_santiago@nps.gov
<input checked="" type="checkbox"/>	Rachel Daniels	NPS		Rachel_daniels@nps.gov
<input checked="" type="checkbox"/>	Dan Wiley	NPS		Dan_wiley@nps.gov
<input type="checkbox"/>	Lisa Yager	NPS		Lisa_yager@nps.gov
<input checked="" type="checkbox"/>	Brooke Stansberry	USFWS	308-382-6468	Brooke_stansberry@fws.gov
<input checked="" type="checkbox"/>	Larry Shepard	EPA	913-551-7441	Shepard.larry@epa.gov
<input checked="" type="checkbox"/>	Eliodora Chamberlain	EPA		Chamberlain.eliodora@epa.gov
<input checked="" type="checkbox"/>	Jennifer Ousley	EPA		Ousely.jennifer@epa.gov
<input checked="" type="checkbox"/>	Amber Tucker	EPA		Tucker.amber@epa.gov
<input type="checkbox"/>	Melissa Maiefski	FWHA	402-742-8473	Melissa.maiefski@dot.gov
<input checked="" type="checkbox"/>	Scott Stapp	FHWA	402-742-8465	Scott.stapp@dot.gov

Agency Review of the PDEIS Meeting
July 17, 2015

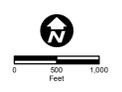
<input checked="" type="checkbox"/>	Carey Grell	NGPC	402-471-5423	Carey.grell@nebraska.gov
<input checked="" type="checkbox"/>	Jason Garber	NDEQ	402-471-2875	Jason.garber@nebraska.gov
<input type="checkbox"/>	Kevin Barta	Knox County	402-288-5610	knoxhwysupt@gpcom.net
<input type="checkbox"/>	Virgil Miller	Knox County	402-394-7054	
<input checked="" type="checkbox"/>	Matt Pillard	HDR	402-399-1186	matt.pillard@hdrinc.com
<input checked="" type="checkbox"/>	Meagan Schnoor	HDR	402-399-4983	meagan.schnoor@hdrinc.com



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 Aerial Imagery: 2006 NAIP, Knox County, Nebraska

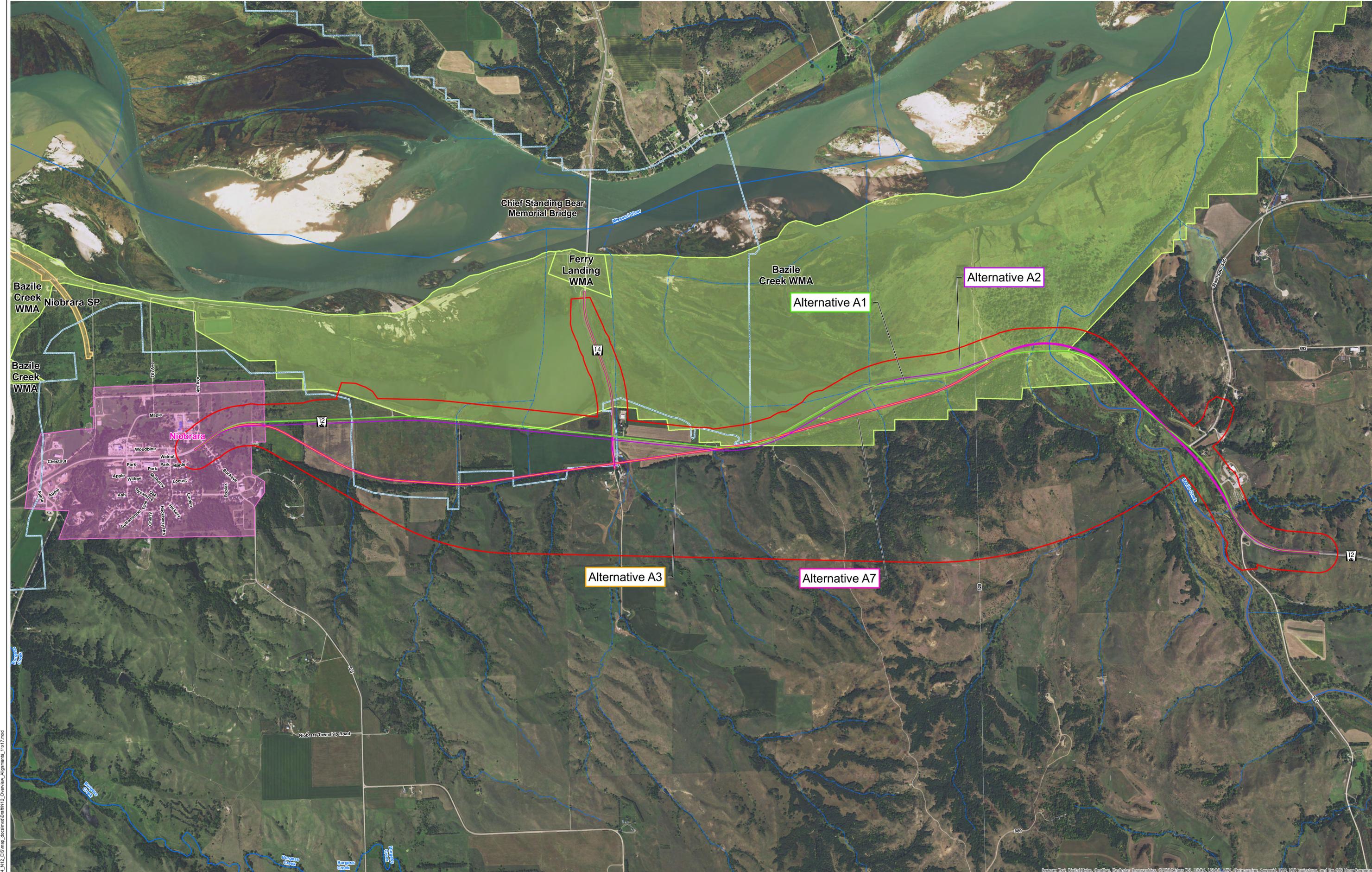


- Alternative A1
- Alternative A2
- Alternative A3
- Alternative A7
- Study Area
- Missouri National Recreational River Boundary
- Wildlife Management area
- State Park
- Waterway



Proposed Alignments - West
 Nebraska State Highway 12
 Knox County, Nebraska

DATE: July 2015
 FIGURE: 1

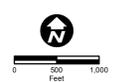


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Aerial Imagery: 2006 NAIP, Knox County, Nebraska

- Alternative A1
- Alternative A2
- Alternative A3
- Alternative A7
- Study Area
- Missouri National Recreation River Boundary
- Wildlife Management Area
- State Park
- Waterway



Proposed Alignments - East
 Nebraska State Highway 12
 Knox County, Nebraska

	DATE	July 2015
	FIGURE	1

Alternatives Development and Screening

Time Phase	2008/Early 2009	JUN 2009	JUL 2009	JUL-SEP 2009	SEP-DEC 2009	JAN-SEP 2010	2011	2012	SEP 2014	JUN 2015		
Actions				<ul style="list-style-type: none"> Agency coordination and preliminary cost screening NPS adds A3 Parallel Elevated Alignment; A3 Parallel Modified Elevated Alignment, A4 Base of Bluffs Elevated Alignment, and A4 Base of Bluffs Modified Elevated Alignment Preliminary cost screening shared A1, A2, A3, A4, B1, and west segment of B2 are practicable NPS Elevated and Modified Elevated alternatives are not practicable 	<ul style="list-style-type: none"> Alternative revisions Concurrence Point 2b was sent Alternative A1 and A2 were combined into one Alternative and traffic maintenance scenarios discussed NPS bridged alternatives re-named Preliminary practicability determination 	<ul style="list-style-type: none"> NDOR revises to alignments and costs Screening revised Concurrence Point 2b was sent 	<ul style="list-style-type: none"> NDOR revises alignments June - August - Flood of Record 	<ul style="list-style-type: none"> NDOR revises costs 2013 - Missouri River Flood Model Changes - NDOR initiates design revision 	<ul style="list-style-type: none"> NDOR competes revision of re-design and new cost estimates N-14 connection to Chief Standing Bear Memorial Bridge added to all alternatives 	<ul style="list-style-type: none"> Completes cost screening 		
Alternative Evolution	Concept A	Roadway in Floodplain	Parallel Alignment	A1 - Elevation Raise on Existing Alignment w/two lane temporary road	A1 - Elevation Raise on Existing Alignment w/two lane temporary road	A1 - Elevation Raise on Existing Alignment - Practicable	A1 - Elevation Raise on Existing Alignment - Practicable	A1 - Elevation Raise on Existing Alignment - Practicable	A1 - Elevation Raise on Existing Alignment - Practicable	A1 - Horizontal adjustments	A1 - Elevation Raise on Existing Alignment - Practicable	
		Reasonable and implementable by NDOR - carry forward for alternative development.		A2 - Elevation Raise on Existing Alignment w/one lane traffic	A2 - Elevation Raise on Existing Alignment w/one lane traffic							
				A3 - Parallel Alignment	A3 - Parallel Alignment	A2 - Elevation Raise on Parallel Alignment - Practicable	A2 - Elevation Raise on Parallel Alignment - Practicable	A2 - Elevation Raise on Parallel Alignment - Practicable	A2 - Elevation Raise on Parallel Alignment - Practicable	A2 - Elevation Raise on Parallel Alignment - Practicable	A2 - Horizontal adjustments	A2 - Elevation Raise on Parallel Alignment - Practicable
				A4 - Base of Bluffs Alignment	A4 - Base of Bluffs Alignment	A3 - Base of Bluffs Alignment - Practicable	A3 - Base of Bluffs Alignment - Practicable	A3 - Base of Bluffs Alignment - Practicable	A3 - Base of Bluffs Alignment - Practicable	A3 - Base of Bluffs Alignment - Practicable	A3 - Horizontal adjustments	A3 - Base of Bluffs Alignment - Practicable
				Base of Bluffs Alignment			A4 - Parallel Elevated Alignment - Not practicable (but will be reviewed outside of the EIS for NPS decision making purposes)	A4 - Parallel Elevated Alignment - Not practicable (but will be reviewed outside of the EIS for NPS decision making purposes)	A4 - Parallel Elevated Alignment - Not practicable (but will be reviewed outside of the EIS for NPS decision making purposes)	A4 - Parallel Elevated Alignment - Not practicable (but will be reviewed outside of the EIS for NPS decision making purposes)	A4 - Total redesign using NDOR design standards, access considerations. Bridge lengths are less than under previous A5 alternative.	A4 - Parallel Elevated Alignment - Not practicable
						A5 - Parallel Modified Elevated Alignment - Not Practicable	A5 - Parallel Modified Elevated Alignment - Not Practicable	A5 - Parallel Modified Elevated Alignment - Not Practicable	A5 - Parallel Modified Elevated Alignment - Not Practicable	A5 - Not redesigned		
						A6 - Base of Bluffs Elevated Alignment - Not Practicable	A6 - Base of Bluffs Elevated Alignment - Not Practicable	A6 - Base of Bluffs Elevated Alignment - Not Practicable	A6 - Base of Bluffs Elevated Alignment - Not Practicable	A6 - Not redesigned		
					A7 - Base of Bluffs Modified Elevated Alignment - Not Practicable	A7 - Base of Bluffs Modified Elevated Alignment -Practicable	A7 - Base of Bluffs Modified Elevated Alignment -Practicable	A7 - Base of Bluffs Modified Elevated Alignment -Practicable	A7 - As this alternative was practicable based on previous cost screening, NDOR applied design standards to re-design. Bridge lengths shortened.	A7 - Base of Bluffs Modified Elevated Alignment -Practicable		
	Concept B	Roadway in Bluffs	Bluffs Alignment	B1 - Bluffs Alignment	B1 - Bluffs Alignment -Practicable	B1 - Bluffs Alignment -Practicable	B1 - Bluffs Alignment -Practicable	B1 - Bluffs Alignment -Practicable	B1 - Bluffs Alignment -Practicable	B1 - Bluffs Alignment -Practicable	B1 - Substantial re-design to consider added engineering needed to address Pierre Shale.	B1 - Bluffs Alignment - Not Practicable
		Reasonable and implementable by NDOR - carry forward for alternative development.	South of Bluffs Alignment	B2 - South of Bluffs Alignment	B2 - South of Bluffs Alignment(West Segment only)	B2 - South of Bluffs Alignment(West Segment only)	B2 - South of Bluffs Alignment -Due to similar wetland impacts as B1 (west segment, no distinct advantage, and higher cost, B2 was determined to be a redundant alternative and not carried forward					
Concept C	Missouri River Mainstem System Operations Changes											
	Outside NDOR authority and would require separate NEPA action to which NDOR would need to address roadway deficiencies after conclusion of that process. Not advanced for alternative development.											



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N-12 Niobrara East & West

Alternative	Average Roadway Elevation	Avg. 100 Year Flood Elevation	Avg. Change between new road and 100 yr	Avg. Change between new road and existing road	Avg. Change between new road and existing ground
A1 West	1245.14	1235.62	9.52	15.00	
A1 East	1239.62	1230.14	9.48	14.10	
A2 West	1244.39	1235.61	8.62		19.62
A2 East	1239.14	1230.14	9.00		18.57
A3 West	1244.78		9.30		19.00
A3 East	1241.38		11.57		17.52
A4 West	1243.95		8.48		20.24
A4 East	1239.62		9.90		19.05
A7 West	1244.78		9.30		19.00
A7 East	1239.86		10.05		15.95

NOTE - A4 should be identical to A2, difference is due rounding factors, use A2

NOTE - A7 should be identical to A3, difference is due rounding factors, use A3